AMERICAN ANNALS

OF

The Deaf

ORGAN OF THE CONVENTION OF AMERICAN INSTRUCTORS OF THE DEAF,

EDITED BY

IRVING S. FUSFELD

UNDER THE DIRECTION OF

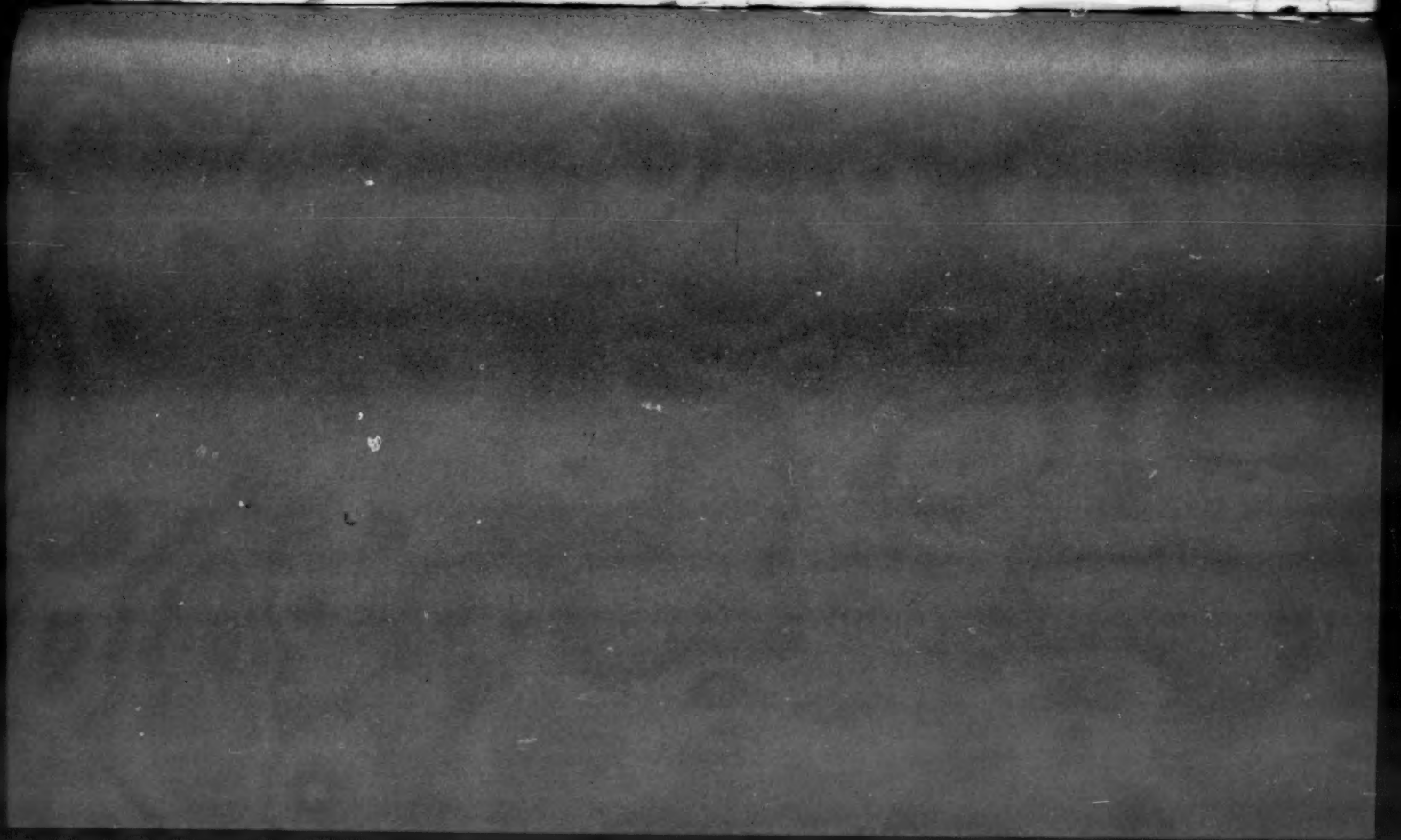
J. W. JONES, OF OHIO, A. L. E. CROUTER, OF PENNSYLVANIA, J. N. TATE, OF MINNESOTA, N. F. WALKER, OF SOUTH CAROLINA, AUGUSTUS ROGERS, OF KENTUCKY, AND I. B. GARDNER, OF NEW YORK,

COMMITTEE OF THE CONFERENCE OF SUPERINTENDENTS AND PRINCIPALS OF AMERICAN SCHOOLS FOR THE DEAF

VOL. LXVI, No. 2

MARCH, 1921

Entered as second-class matter April 8, 1918, at the post office at Washington, D. C., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized October 29, 1918.



AMERICAN ANNALS OF THE DEAF
VOL. LXVI MARCH, 1921 NO. 2

REPORT ON INDUSTRIAL TRAINING IN THE PENNSYLVANIA INSTITUTION FOR THE DEAF AND DUMB

In the spring of 1920, a special Committee on Industrial Training, composed of Mr. Leonard T. Beale, Chairman, Mr. George W. Elkins, jr., and Mr. Henry B. Coxe, was appointed by the Board of Directors of the Pennsylvania Institution for the Deaf and Dumb. This Committee requested that a careful canvass be made of all pupils who had been in school during the past ten years, and of superintendents and principals of residential and day-schools in the United States, in order to secure facts and suggestions that would be helpful in improving conditions in the Industrial Department.

This investigation was made in the summer of 1920. Questionnaires were prepared, approved by the Committee, and sent to the pupils and officials mentioned above. After all the replies received had been collated, a tabulated summary was sent to the Committee with the following comment by Dr. A. L. E. Crouter, Superintendent of the Institution.

1. *Heads of Schools.*—Some ninety-five questionnaires, approved by your Committee, were mailed to superintendents and principals of residential and day-schools, eliciting replies from 61 as shown in the accompanying statistical statements, conveniently arranged for your information. But few day-schools made reply, presumably owing to the fact that few trades are taught in schools so conducted.

The attendance in the schools reporting varies greatly. The smallest is that of the Lancaster (Pennsylvania) Day-School, where the attendance was reported by the principal as being but 5 children; the largest attendance is that of our own school here in Mt. Airy, where at the present time 520 pupils are under instruction. The schools next in size to our own are the Columbus (Ohio) School, 503; the Austin (Texas) School, 478; the New York Institution, 460; and the Jacksonville (Illinois) School, 407.

As shown in the statistical tabulation, the length of the period of instruction varies considerably. In many of the state and day-schools the time is unlimited. In the incorporated schools, institutions maintained like our own, the time varies from twelve to eighteen years, but in none is the period of instruction less than twelve years. This is a great change from one hundred years ago, when the time was limited to from four to six years.

Of the trades taught in the various schools at the present time, carpentry, printing, farming, baking, painting, shoemaking, tailoring, cooking, dressmaking, and domestic science take the lead. In some schools, much attention is given to dairying (all large state schools maintain dairies), poultry raising, and fruit growing. In all schools where numbers permit, the great value of trade teaching is recognized and emphasized. Day-schools do not attempt much in the way of trade teaching.

The time allowed in most schools for the teaching of trades is from two to three hours daily. For academic work five hours is given in almost all schools. In our own school, under the present programme for shop work, the older pupils have three hours daily (seven hours on Monday) and the younger, the intermediate and primary pupils old enough to profit by such instruction, have from two to two and one-half hours daily.

In response to the inquiry as to what trades heads of schools regard as being most helpful to the deaf, there is much diversity of opinion. Twenty-seven regard printing,

carpentry, and shoemaking as the most helpful trades; ten recommend farming and dairying; five favor baking and cooking; twelve regard dressmaking, cooking, domestic science, and millinery work as best for girls; while six regard the selection of trades largely as a matter of location.

As regards recommendations and changes, seven recommend instruction in auto-repairing and barbering; three would add designing, mechanical drawing, and typewriting. All teach some form of drawing. Three would add metal work and two would add instruction in photography. To the trades now taught in our own school, I would add, should conditions permit, poultry raising, fruit growing, and farming and dairying as being good occupations for the deaf.

Concerning the inquiry as to whether graduates pursue the trades acquired at school, as shown in the table, there is much diversity of reply. In our own school, pupils graduated and discharged follow in the majority of cases the trade acquired here, or some closely allied trade. Many become metal workers of some kind. An examination of the tables shows similar results in other schools. I should say that most printers and wood-workers follow their trade; of the rest, from forty to sixty per cent also follow the trade acquired at school, the balance drifting into other occupations, many of them becoming factory operatives and mechanics.

2. *Inquiries Sent Out to Pupils.*—Some six hundred and forty inquiries were mailed to the graduates and honorably discharged pupils of the school during the past ten years. Copies of the questionnaire addressed to the graduates and to the heads of schools as well, are submitted with this report. As Mr. Lyman Steed has had much to do with the questionnaires sent out to the pupils, I have asked him to collate the replies received, and therefore embody his summing up and tabulation as a part of this report. The two reports on the replies of the heads of schools and the replies received from former pupils will constitute a very complete summary of the results of the investigation.

It is to be regretted that so many of the pupils failed to make reply. This, I feel, was largely owing to change of address and consequent failure, after repeated effort, to reach individuals. Not more than forty per cent of the pupils addressed were reached. As a remedy for this unfortunate condition, I would suggest that the head of the Industrial Department be required to keep in touch with all the graduates and honorably discharged pupils of the school by writing them twice a year, and making special inquiry as to their social condition and success in life. In this way, the school can be kept fairly well acquainted with the after life of its pupils, and future investigations of the character of this one made more complete.

It is interesting to note the decided unanimity in which pupils make reply regarding the value they place upon speech in connection with their daily duties. Out of two hundred and fifty-eight replies received, two hundred and thirty-two state their speech and lip-reading have aided them in their daily tasks; seven report that they receive little benefit, while nineteen state their speech and lip-reading have been of no practical benefit to them. These replies are most suggestive and place the value of speech and lip-reading to our pupils after school life has ended beyond all question.

Their use of speech in addressing strangers is also very suggestive. One hundred and ninety-eight out of two hundred and fifty-eight state they use their speech in addressing strangers. This means that seventy-five per cent are able to converse with strangers by means of speech, a most encouraging result. In regard to the value our graduates place upon education, their replies are practically unanimous—two hundred and forty-two out of two hundred and fifty-two make a very positive reply on this point.

Among the trades suggested by the boys as worthy of introduction, linotype work, plumbing, machine work, and agriculture are given the preference; the girls favor typewriting and more intensive training in cooking and dressmaking.

Copy of questionnaire addressed to the heads of schools:

THE PENNSYLVANIA INSTITUTION FOR THE DEAF AND DUMB
MT. AIRY, PHILADELPHIA, PENNA.

.....1920

To.....
Superintendent or Principal,
School for Deaf.

Dear Sir: A Special Committee appointed by the Board of Directors of this Institution to discover whether any or what changes may be desirable in our Industrial Department is seeking information regarding trade-teaching as pursued in American Schools for the Deaf and will be greatly obliged if you will kindly make replies to the following questions, forwarding same to me in the enclosed stamped envelope. Thanking you in advance for any information you may be able to give. Truly yours,

A. L. E. CROUTER, *Superintendent.*

1. The name of your school.....
2. How many pupils have you?.....
3. The length of the term of instruction.....
4. What trades are taught?.....
5. The length of time allowed daily and yearly to trade learning .....
6. What trades do you regard as being most helpful to the deaf?.....
7. What changes would you recommend in your own school? .....
8. Do your pupils follow the trades acquired while at school after graduation?.....

Signature.....

Replies received from residential schools	50
Replies received from day-schools	11
No reply received	34
Total number of questionnaires sent out	95

Questions 1 and 2.—Name of School, and Number of Pupils

The names of the schools from which replies were received and the number of pupils in each of these schools are not given in this report. The number of superintendents or principals reporting is noted under each heading. The smallest number of pupils reported in any residential school was thirty-three, the largest, five hundred and twenty. The smallest number of pupils reported in a day-school was five, the largest, three hundred.

Replies to Inquiry from Residential Schools

Question 3.—Length of Term of Instruction

Unlimited 23	12 to 16 years 3	11 years 1
12 to 18 years 11	12 to 15 years 6	No report 5
	12 years 1	

Question 4.—Trades Taught

Printing 43	Painting 10	Glazing 2
Carpentry 39	Fancy work 7	Manual training 2
Shoemaking 28	Millinery 6	Art work 2
Sewing 26	Basketry 6	Harness-making 2
Cabinet-making 21	Weaving 5	Drawing 2
Cooking 20	Laundering 5	Office work 1
Dressmaking 17	Poultry-raising 4	Photo-engraving 1
Domestic science 16	Dairying 4	Linotyping (for girls) 1
Tailoring 14	Barbering 3	Machine-shop work ... 1
Agriculture 14	Sign-painting 3	Photography 1
Gardening 11	Caning 3	Typewriting 1
Baking 11	Mechanical drawing .. 3	Iron work 1
	Auto-repairing 2	

Question 5.—Hours Daily for Trade Learning

2 to 5 hours 1	2 1-2 hours 18	1 1-2 hours 1
3 hours 5	2 1-4 hours 2	1 hour 3
2 1-2 to 3 hours 1	2 hours 12	Varies with individual 2
2 3-4 hours 1	1 3-4 hours 1	No report 3

Question 6.—Trade Regarded as Most Helpful to the Deaf

Printing 30	Tailoring 5	Auto-repairing 1
Carpentry 21	Manual training 4	Millinery 1
Shoemaking 12	Cabinet work 4	Can't say 1
Agriculture 10	Painting 4	Depends on location .. 6
Sewing 8	Domestic science 4	No report 5
Cooking 7	Machine-shop work ... 1	Trades that train hand and eye 1
Dressmaking 6	Housework 1	
Baking 5	Gardening 1	

Question 7.—Changes Recommended

Boys should finish trades on regular jobs	1
Better industrial teachers	1
Trade instructors to be recognized as teachers	1
Give more time	1
More time; better equipment	1
Greater correlation between industrial and literary departments	1
Eliminate all trades except tailoring and cabinet-making	1
Abolition of tailoring and shoe work; more time on wood and metal work	1
Improve facilities	1
More teachers	1
Separation of manual and oral deaf	1

Would add:	
Auto-repairing	8
Agriculture	7
Barbering	5
Tailoring	4
Printing	4
Painting	3
Paper-hanging	2
Domestic science	1
Baking	1
Plumbing	1
Manual training	1
Battery work	1
Poultry-raising	1
Shoemaking	1
Typewriting	1
Machine shop	1
Photo-retouching	1
Dairying	1
Blacksmithing	1
Metal work	1
None at present	8
No answer	6

Question 8.—Do Pupils, after Graduation, Follow Trades Acquired at School?

Usually	4
About half	1
Some do	6
Less than half	1
Probably one-third	1
Sometimes	1
Shoemakers	1
Yes	2
Printers do; others work in factories	3
Printers do; some of the others do	4
Yes; to a large extent	1
A fair per cent do	1
Printers, bakers, and carpenters do	1
About 60% do	2
Often follow other trades	1
Most wood workers do	1
A great many do	2
Yes; when they can	1
No; boys go into shops	2
A limited number do	2
As a rule they do not	1
Many do not	1
No; they work in factories	1
Rarely	1
Not always	2
Not all	1
In the majority of cases they do	1
No answer	4

Replies to Inquiry from Day-Schools

Question 3.—Length of Term of Instruction

Unlimited	7
No answer	4

Question 4.—Trades Taught

Domestic science	8
Carpentry	5
Manual training	4
Printing	3
Dressmaking	3
Basketry	2
Mechanical drawing	2
Embroidery	1
Millinery	1
Tinsmithing	1
Sign-writing	1
Typewriting	1
Shoe work	1
French flower-making	1
Bookkeeping	1
Lettering	1

Question 5.—Hours Daily for Trade Learning

2-3 to 3 1-2 hours per week	1
2 hours a week	4
1 1-2 hours a week	2
1 hour a week	1
1-3 of a day a week	1
No time given	2

QUESTION 6.—TRADE REGARDED AS MOST HELPFUL TO THE DEAF

Depends on location	1	Manual training	1
No reply	1	Domestic science	1
Mechanical, boys; domestic science, girls	1	Depends on ability and location	1
Printing	2	Tailoring	1
Millinery	1	Wood work	1
		Shoe work	1
		Depends on the pupil	1

QUESTION 7.—CHANGES RECOMMENDED

More instruction in manual arts	1	Should like to extend printing and domestic science to include all allied trades	1
More trade teaching	1		
None	5	Add printing, carpentry, mechanical drawing, designing, cooking	1
No reply	1		
Cannot say	1		

QUESTION 8.—DO PUPILS, AFTER GRADUATION, FOLLOW TRADES ACQUIRED AT SCHOOL?

No reply	4	No graduates yet	3
Usually	1	Generally those who continue through the high school	1
Capable printers follow their trades; usually 50% of them	1	As a rule no; they work in factories	1

Copy of questionnaire addressed to the pupils:

THE PENNSYLVANIA INSTITUTION FOR THE DEAF AND DUMB
MT. AIRY, PHILADELPHIA, PENNA.

.....1920

.....

The Board of Directors desire to find out if the trades now taught in Morris Hall are helpful to our pupils after they leave school. You can help us by answering the following questions. Please send your answers to me as quickly as possible.

A. L. E. CROUTER, *Superintendent.*

1. What is your name?.....
2. What is your address?.....
3. How old are you?.....
4. When did you first come to school?.....
5. When did you leave school?.....
6. What trade or other useful occupation did you learn while at school?.....
7. Have you followed the trade you learned here since you left the Institution, and if so for how long a time?...
8. If not, what are you doing now?.....

9. Why did you change your trade?.....
10. Did you learn to use the linotype here?.....
11. Are you married or single?.....
12. Do you earn enough money to live well?.....
13. What new trades or useful occupations do you think the School should teach?.....
14. Do you think more time should be given to trade learning while at school?.....
15. Have your speech and lip-reading helped you in your work? .....
16. Can you talk to strangers by means of speech and lip-reading? .....
17. Are the educated deaf more successful in life than the uneducated? .....

The total number of questionnaires sent to pupils who were in school during the past ten years was six hundred and forty. Two hundred and fifty-eight replies were received, one hundred and five letters were returned undelivered, and two hundrd seventy-seven were not answered.

The ages of the pupils vary from sixteen to thirty-three years. Most of them are between twenty-two and twenty-eight years of age. The average age is twenty-three years, and the average time in school is nine years.

Some of the boys worked at more than one trade while in school and that has been included in No. 5 of the analysis given below. All of the boys and girls have been following the trades for the number of years mentioned under No. 6 since they left school.

While many of the trades followed at the present time are very different from those learned at school, it is evident that the great majority of our pupils are able to make a comfortable living with the shop

training received here. Only fourteen report themselves unable to earn enough to live well.

Among the trades suggested by a number of the boys are: electrical work, machine-shop work, mechanical drafting, plumbing, more linotype work, and agriculture. The girls suggest typewriting and more intensive training in dressmaking and cooking.

The number of pupils favoring and opposing more time for work in the shop is about evenly divided. Where reasons have been given for or against more time in the shop, they have been noted under No. 14, below.

The following table shows how the graduates of the school value speech, lip-reading, and education.

Have your speech and lip-reading helped you in your daily work?

	Boys.	Girls.	Total.
Yes	127	105	232
A little	5	2	7
No	14	5	19

Can you talk to strangers by means of speech and lip-reading?

	Boys.	Girls.	Total.
Yes	104	94	198
A little	23	12	35
No	19	6	25

Are the educated deaf more successful in life than the uneducated?

	Boys.	Girls.	Total.
Yes	135	107	242
The same value	5	2	7
Don't know	2	2	4
No answer	4	1	5

For the convenience of those interested a separate report has been made for the men and the women.

Analysis of Replies from Former Pupils: Men

1. Total number of questionnaires sent out, 365.

2. Replies received, 146.

Questionnaires returned, 45; Questionnaires not returned, 174

3. Average age of pupils replying, 23.3 years.

Oldest, 33; youngest, 16

4. Average time in school, 9 years.

2 were in school	1 year	14 were in school	8 years
3 were in school	2 years	14 were in school	9 years
2 were in school	3 years	26 were in school	10 years
5 were in school	4 years	26 were in school	11 years
9 were in school	5 years	14 were in school	12 years
10 were in school	6 years	13 were in school	13 years
8 were in school	7 years		
		146	

5. Trade acquired at school:

Carpentry and cabinet-making	42	Painting	7
Shoemaking	32	Weaving	2
Tailoring	31	Farming	1
Printing	28	Laundering	1
Bricklaying	10	No trade	3
Baking	9		

6. Length of time boys followed trades after leaving school:

Shoemaking: 6 mo., 3 yrs., 2 1-2 yrs., 3 yrs., 4 yrs., 4 yrs., 4 yrs.	7
Bricklaying: 5 yrs.	1
Baking: 2 1-2 yrs., 1 yr.	2
Carpentry: 10 yrs., 4 yrs., 7 yrs., 1 yr., 9 yrs., 5 yrs., 1 yr., 1 yr., 5 yrs., 6 yrs., 7 yrs., 4 mo., 4 yrs., 7 yrs.	14
Printing: 6 mo., 5 mo., 7 yrs., 4 yrs., 5 yrs., 2 yrs., 8 yrs., 2 yrs., 8 yrs., 7 yrs., 11 yrs.	11
Painting: 4 yrs., 5 yrs., 1 yr., 4 mo.	4
Tailoring: 4 yrs., 10 yrs., 3 yrs., 4 yrs., 1 1-2 yrs., 1 yr., 6 mo.	7
	46

7. Trades not followed after leaving school:

Shoemaking	27	Painting	4
Tailoring	22	Laundering	1
Carpentry	22	Farming	1
Printing	10	Weaving	1
Bricklaying	8		
Baking	4		100

8. Present trade followed:

Automatic hand	1	Machinist	16
Ford Motor Company	1	In a drug store	1
Laborer	8	Cabinet maker	1
Farmer	9	Importer	1
Carpenter	3	Fur, felt hatting	1
Weaver	1	Photography	1
Silk mill worker	8	Tin-mill worker	1
Automatic winder	1	Electric worker	1
Truck driver	1	Rubber factory worker	2
Coal miner	4	Nurseryman	1
Factory worker	5	Shipping clerk	1
Cement blocker	1	Department store delivery	1
Cigar maker	2	Teacher	1
Chain maker	2	Tobacco jobber	1
At school	2	Supervisor	2
Foundry helper	1	Auto repairman	1
Fisherman	1	Draftsman	1
Baker	1	Not employed	4
Chemical manufacturing	1	No report	8
Riveter on oil tanks	1		

9. Reasons given for changing trades:

Shoemaking—

Trade learned differs from factory work	1
Small wages	2
Father's wish	1
Wanted farm work	6
Could not get work	2
More money	10
Liked machinery	2
Did not learn the trade well	1
No reason given	2

Carpentry—

Could not get a job in that trade	4
Health	2
More pay	7
Father wanted him to become a tailor	1
No winter work there	1
Liked shoemaking	1
Liked fishing	1
No reason given	5

Tailoring—

Trade dull	3
Uncongenial work	7
Liked carpentry better	1
Poor wages	4
Could not get work	2
Wanted outside work	1
To be with father	1
Liked weaving better	1
Liked teaching better	1
Liked farming better	1

Baking—

Poor wages	1
Better vocation	1
Did not like it	1
Could not get a job	1

Printing—

Health	1
More pay	3
No chance to work at trade	1
Liked optical trade	1
Strain on eyes	1
Did not like it	1
No reason given	2

Painting—

Preferred machinery	1
Father wanted him on farm	1
No steady work	1
Health failed	1

Weaving—

No work	1

Farming—

Secured job in restaurant	1

Laundering—

More pay	1

Bricklaying—

More pay	3
Could not get work	2
No reason	3

10. Number married, 20; number single, 126.

11. Number self-supporting, 138.

12. Number not self-supporting (in school, 2), 6.

13. New trades suggested:

Tool-making	1
Electricity	8
Wood-carving	1
Tin-roofing	1
Photography	1
Masonry	1
Mechanical drafting	7
Plumbing	9
Pipe and steam fitting	1
Laboratory work	1
Don't know	8
Weaving	8
Machinist	25
Cabinet-making	6
Gardening	3
Bricklaying	3
More linotypes	10
Bookbinding	1
Horticulture	1
Chemistry	3
Tinsmithing	1
Coppersmithing	1
Agriculture	19
No answer given	15
Engraving	7
Mechanical drawing	5
Wood pattern-making	1
Engineering	4
Multiple magazine linotype	1
Chicken-raising	1
Bookkeeping	1
Linotype "dummy" keyboards	1
Present trades sufficient	30
Present trades sufficient, but more up-to-date methods	1

14. Additional time suggested for trade learning: *Should more time be given to trade learning while in school?*

Yes (no reason given).....66
Yes (reason given).....10
1. Pupils should master a trade.
2. There is not enough time to learn a trade well.
3. Only when a pupil shows a temperamental dislike for books and a definite interest in his trade.
4. If you like the trade.
5. One or two hours more.
6. It depends on the age of the pupil.
7. Less time in intermediate grades and more time in advanced grades.
8. And teach modern methods.
9. With more modern machines.
10. One-half time should be spent in industrial training.

No; not necessary.....30
No; present time sufficient.....7
Don't know.....11
Not answered.....15
No (reasons given).....7
1. Pupils should have a better understanding of English.
2. Not too much. It tends to tire. Concentrate on education.
3. Because education is essential to the success of the deaf.
4. More time devoted to trades would be a detriment to school work, which I believe is the more important of the two.
5. But more up-to-date machinery and methods.
6. But trades taught in modern ways.
7. Emphasize academic work.

15. Helpfulness of speech and lip-reading: *Have your speech and lip-reading helped you in your work?*

Yes, 127; not much, 5; no, 14

16. Value of speech and lip-reading in communicating with strangers: *Can you talk to strangers by means of speech and lip-reading?*

Yes, 104; a little, 23; no, 19

17. Value of education: *Are the educated deaf more successful than the uneducated deaf?*

Yes, 135; no, 4; the same value, 5; don't know, 2

Analysis of Replies from Former Pupils: Women

1. Total number of questionnaires sent out, 275.

2. Replies received, 112.

Questionnaires returned, 60; Questionnaires not returned, 103

3. Average age of pupils replying, 23.4 years.

Oldest, 80; youngest, 16

4. Average time in school, 8.8 years.

2	were in school 1 year	13	were in school 9 years
6	were in school 2 years	9	were in school 10 years
5	were in school 3 years	19	were in school 11 years
3	were in school 4 years	12	were in school 12 years
7	were in school 5 years	9	were in school 13 years
8	were in school 6 years	7	were in school 14 years
4	were in school 7 years		
8	were in school 8 years	112	

5. Trade acquired at school:

Dressmaking	49		
Sewing	32	Dressmaking and cooking	5
Dressmaking and millinery	12	Sewing and cooking	4
Dressmaking, millinery, and cooking	6	No trade	4

6. Length of time girls followed trades after leaving school:

Dressmaking: 4 yrs., 3 yrs., 2 yrs., 2 1-2 yrs., 1 yr., 1-2 yr., 1 yr., 1 yr., 5 yrs., 3 yrs., 2 yrs., 6 yrs., 5 yrs., 7 yrs., 8 yrs., 3 yrs., 2 yrs., 6 yrs., 1 yr., 1 1-2 yrs., 3 yrs., 8 yrs. 22
Sewing: 3 yrs., 4 yrs., 9 yrs., 6 yrs., 4 yrs., 7 yrs., 5 yrs., 5 yrs. 8

7. Trades not followed after leaving school:

Dressmaking	26	Dressmaking and cooking	2
Sewing	14	Sewing and cooking	2
Dressmaking and millinery	4	No answer	34

8. Present trade followed:

Cloth mill	1	Silk mill	6
Laundering	1	Chambermaid	2
Factory	7	In college	3
Hosiery mill	1	Shipping department	1
Cigar factory	2	Supervisor	3
Waitress	1	Waist operator	2
In high school	2	Knitting mill	1
Timekeeper	1	Operator on skirts	1
Tailor	1	Shoe factory	1
Umbrella factory	1	Typewriter	2
In bakery	1	Tobacco factory	1
Mailing department	1	Housekeeping	24
Inspector in suit house	1	Married	23
Dental work	1	No answer	11
Delivery department	1		

9. Reasons given for changing trades:

Liked mill work	1	Not well enough advanced	1
Convenient	1	Father died	1
To remain at home	16	Could not get that kind of work	2
Better pay	17	Because I never learned to cut	1
To work in silk mill	2	Because I did not have advanced lessons	1
To become an engraver	1	Ill health	1
Did not like it	3	No reason given	33
Too confining	1		

10. Number married, 23; number single, 89.

11. Number self-supporting, 79.

12. Number not self-supporting, 8; number living at home supported by parents, 22; number in college, 3.

13. New trades suggested:

Machine operating	5	Filing	1
Office work	1	Business methods	1
Typewriting	12	Care of sick	1
Printing	1	More experience in cutting and fitting	1
More practice in using patterns	1	More millinery	8
Illustrating	1	Weaving	2
Drawing	1	China painting	1
Dressmaking	9	Clerical work that requires no hearing	1
Designing	2	Embroidery	2
Written and practical tests given in dressmaking	1	No trades to suggest	54
Cigar-making	1	Present trades sufficient	5
More cooking	11		
Bookkeeping	8		

14. Additional time suggested for trade learning: *Should more time be given to trade learning while in school?*

Yes (no reason given) 58
Yes (reasons given) 4
1. Because after they leave school they will know how to do cutting and fitting.
2. As that is what counts when school is out.
3. A little more time.
4. As most students will be compelled to earn their living after leaving school.

No; not necessary 18
No; present time sufficient 3
Not answered 14
Unable to say 5
No (reasons given) 10
1. Time given now well spent. Give pupils of low mentality more shop work.
2. More time should be given to teaching the English language.
3. Teach as other schools teach.
4. Time now given is sufficient as the teaching is thorough and is continued for a number of years.
5. Two and one-half hours per day during the school year is sufficient.
6. Not if it interferes with school work.
7. Only as much time as can be spared from school.
8. Think present system satisfactory.
9. I think book learning is just as important.
10. Let the school decide; they know best.

15. Helpfulness of speech and lip-reading: *Have your speech and lip-reading helped you in your work?*

Yes, 105; not much, 2; no, 2; no answer, 3

16. Value of speech and lip-reading in communicating with strangers: *Can you talk to strangers by means of speech and lip-reading?*

Yes, 94; a little, 12; no, 5; no answer, 1

17. Value of education: *Are the educated deaf more successful than the uneducated deaf?*

Yes, 107; no, 2; the same value, 2; no answer, 1

A further analysis made by Mr. L. T. Beale of the figures presented on page 131 of the men's report and on page 134 of the women's report discloses the following:

PERCENTAGE OF PUPILS WHO TAKE UP THEIR VARIOUS TRADES AFTER LEAVING THE INSTITUTION

MEN		WOMEN	
Shoemaking	22%	Dressmaking and millinery	0%
Bricklaying	10%	Dressmaking	31%
Baking	22%	Sewing	25%
Carpentry	33%	All trades combined	28%
Printing	39%		
Painting	57%		
Tailoring	23%		
All other trades	0%		
All trades combined	28%		

Grand total, both boys and girls, all trades.....28%

Compiled by LYMAN STEED,
Principal, Advanced Department,
Pennsylvania Institution,
Mt. Airy, Philadelphia, Pa.

AMERICANIZATION IN OUR SCHOOLS FOR THE DEAF

On every side of us nowadays we hear the expression, Americanization, which is calling more and more for a national spirit peculiar to our western temperament and liberty. Originally every one of us, except the aboriginal Indians, has come from some foreign blood. Our birthright as Americans may vary from one generation to a dozen generations back. Most of us have been like Ruth, who forsook her land, her people, and even her religion to follow Naomi to the land of her adoption. The uppermost thought in our minds to-day is, "What is to be the destiny of our nation, America, which was cradled in great hardships before it could gain its present ideals of life?"

The night before he passed on to the Great Beyond, Colonel Theodore Roosevelt sent this thrilling message to the American Defense Society: "One flag, the American flag; one language, the language of the Declaration of Independence; one loyalty, loyalty to the American people. There must be no sagging back in the fight for Americanism." These burning words demand that we carry on; that we stand on only one platform—"stalwart, straight-out, thorough-going Americanism."

As the units of a nation think, so is that nation. We need to see to it that public sentiment is so instilled, cultivated, and directed individually that there will be no question as to our American national spirit and ideals. A magazine recently made the statement that one-half the population of the United

States are the direct descendants of Anglo-Saxon ancestry. So then, the traditions of the Magna Charta, the Pilgrim Fathers, the Glorious Revolution of 1688, the Revolutionary War, the Spanish War, the recent world war against autocracy shall be as beacon lights of liberty and fraternity and national godliness.

As we celebrated last year, both in England and America, the great historic event of the sailing of the Pilgrims to America, let us not forget what those early fathers stood for. They came to find a place where they might enjoy their own ideas of church worship, but they set up a very definite standard to maintain their theories. They organized a civil government which was the seed of our present form of democracy. They established the principles of public education and higher education which have been the bulwark of our American civilization. We may to a certain extent mold the minds of the adult half of our population and create a certain standard of life, but in the long run we must depend on the more plastic thought of young America. We must work to form and reform the next generation that it may be better than our own.

The whole world, every nation, is going through the travail of reconstruction. We cannot stand still. Some nations are retrograding. Waves of crime and intense selfishness, a striving for unearned riches and power, are sweeping over every land, our own as well. The child of to-day is the man of to-morrow. We must hold up the standards of education and culture, or we shall pay the cost for long years to come. The course of education is the steering wheel of the whole course of future government, business affairs, and social happiness.

There is a movement to standardize the course of instruction in physical culture, mental culture, and training in useful trades that is very timely. Without a sound foundation of training in strong physique, intelligence, and healthy moral fiber combined, our boys and girls will go on handicapped and inefficient.

These general principles are just as applicable to the deaf and the blind as to those with all their senses. It is like the story told by an educator who overheard two Irishwomen talking. As one had just come out from the doctor's with her little boy, the other inquired what the trouble with Jimmy was. The mother replied, "The doctor says he has a tendency." "And what is that?" "Oh, that is something he hasn't got now, but he is liable to get it most any time." The tendency to lawlessness is possessing the youth and needs to be checked. It is no respecter of persons; no one is entirely immune to the fever. Some take to it naturally.

We must always keep in focus the real aim and object of our schools—to train the children to take their place in society as good citizens, able to make their own living, able to grasp every bit of happiness life may yield, and able to count as sensible units in the welfare of the community they live in.

Dean Russell of Teachers College, Columbia University, made the remark that "training for citizenship is more than giving instruction in school subjects. Patriotism, loyalty, and courage are as contagious as measles. Right example is the surest way to inculcate appreciations and attitudes, and to demonstrate the value of fair play, team work, and self-control."

It is easy to generalize and talk in abstract terms. The great body of school teachers forms the great dynamic medium for transforming the ideals of America into concrete American boys and girls who live them. We must incarnate in daily human thoughts and deeds that which we believe. We have all kinds of raw material to deal with, some of finer quality, some baser, but we will make the best we can in the finished products. There are various grades of iron and steel depending on the readiness of the raw materials to assimilate the finer qualities of certain alloys. The same is true of the human equation. Any flaws that develop must be put through the electric process to do away with the danger, though the process is not so possible with human beings as a whole as it is with metals.

The government reports eight and a half million illiterates above the age of ten years in our country. Before the war we did not pay so much attention to this class, but in the war every unit had to count in production of some kind. They were able to talk and hear, but this is of no avail when many orders are put in writing. The ability to read and write may not be very great, but it should not be lacking. Still more essential is it for the deaf who lack all means of communication otherwise. There should be some change in the state laws regarding compulsory education to make it possible to send deaf children to school even if to another town where there is an institution maintained by the state.

Of the 20,000,000 children of school age in America, 76 per cent go only through the fourth or fifth grade, 6 per cent finish the eighth grade, and 18 per cent play "hookey" all the time. The ratios for deaf children are not available. These figures are

staggering to the complacent American mind that prides itself on the fact that its ideal of high education is quite general. There is much truth in the saying, "To him that hath shall more be given." The small per cent that continues on to the top is increasing until it is almost double as a result of the increased valuation placed upon knowledge, but the high quality is said to be not so good as heretofore.

The large number of deaf children for whom application is made each year indicates a large source of supply. It implies the possibility of a greater number who are unaware of the existence of schools that can meet their needs. Possibly our schools for the deaf are not sufficiently advertised in the summer time and during the school term to make their existence familiar to the general public. Our state institutions are a public benefaction and should be advertised as such.

The remaking of men who had a physical hardiness, a mental alertness, and a fair degree of moral caliber into suitable material for soldiers was certainly remarkable. There is a close relation between the physical slouch and the mentally and morally backward child. As Kingsley says in his story of "The Water Babies," "He who wills to be clean, clean he will be. He who wills to be filthy, filthy he will be." Yet there is the chance, where such an environment, often compulsory, is thrown around boys and girls, to appeal to them and make good men and women.

We should not lose the profit derived from the years of experiment in army education, but should apply the principle of the theory to our deaf children. They are men and women in the making. We are so prone to think of the present that we forget the

future. We see only children before us. We must see in them the adults who will shoulder responsibilities in a few years.

Of course some will well say that not all children are born with equal mental or physical powers. That goes without saying. As Lincoln once said, "The Lord made millions of common people." Carlyle remarked on one occasion, "England has forty million people, mostly fools." The following statement sent out by the National Security League expresses a splendid sentiment:

> We cannot afford to sleep nights unless we know that as far as in us lies we are developing the power not only of the froward, the brilliant, the fortunate, but of every pupil, the unlucky, the delinquent, the stupid, as well as the wise.

Modern medical science knows that there are strong reactions between the physical and the mental. Most schools provide doctors and nurses to care for the sick. The dentist comes every week to examine and fix up the teeth. But when many a child complains that his eyesight is defective, little attention is paid. As a rule children are truthful about their aches and pains. Defective sight is a strain upon the nerves, often interfering very decidedly with mental work. If one were lame, a crutch would be provided at once. Yet if the eyes are ailing, nothing is done, since the lameness is not apparent. In fact the child's complaints are often discredited.

Many magazines carry advertisements of the necessity for better lighting systems in shops and mills, in order to facilitate production and efficiency. One is bound to slow up and make errors on account of darkness. Some men advise more window light-

ing, and others suggest "barreled sunlight," or, in other words, scientific painting. The average schoolroom still adheres to the old-time architectural style of fixtures regardless of their efficiency or lack of efficiency. The walls may be tinted aright, but the window lighting is often defective on bright sunny days, and the electric lights do not utilize the ceiling and walls to give an easy, soft glow. Southern exposures must have dark shades to break the sunlight and so darken the room. Surely there must be a remedy, but it is not in the hands of the teacher to rectify.

Physical education should be standardized. Most of our schools have costly gymnasiums. The first thought is to cultivate a high degree of muscle and suppleness. In the school department the pupil is not permitted to dictate whether he may stay away from class, but he is allowed to use his youthful judgment and pleasure about building up his physique. The gymnasium should be as compulsory as the schoolroom and shop. The weaklings need corrective exercises to create a natural erectness and use of all parts of the body so that they will function properly. Every child needs to be built up to gain stamina to withstand the attacks of disease. There is a real science in gymnastics. A $35,000 gymnasium is too valuable a plant, too costly an experiment to allow a few who are strong already to reap all the benefit. America stands for equal opportunity for all. The weak child is not able to judge what he needs, nor has he the endurance to carry on for himself.

The trade-work class should be built up along lines of school work. The school department touches one side of life. The shops touch another very practical

side. The boys and girls will have to make a living from their knowledge of shop work rather than from their ability to read the newspaper and magazine. Many a big boy and girl is stumped by the shop terms, names of tools, and odd phrases used in trade work. Among normal hearing children the names of tools and what one must do are heard quite often in the shop. A ready tongue asks and gets information easily. But this is not true of the deaf. The terms and expressions must be impressed on their attention by special devices. One can pick up the work after a fashion just by imitating others in the use of tools and machinery. If the habit of knowing is emphasized in the school shop, the pupil will be apt to apply the same system to any other trade he may learn in after years.

The trade shop should have a definite outline of everything a boy or girl should learn before he or she is considered a competent worker. No pupil should imagine that he can get a recommendation unless he has covered a certain number of units with a grade of over 70 per cent.

Another concrete phase of Americanizing the ideals, the habitual best thoughts, of our boys and girls should be along the line of practising manners and morals. We want them to be neither molly-coddles nor toughs. Recently in the New York City schools there was put into effect a system of talks on cultivating courtesy and good morals which made quite an improvement in the discipline. The Great Teacher used the line of least resistance to instill his ideals of right and wrong. He sugar-coated his morals in easily understood stories of daily life. He appealed to the human interest of his audiences. It takes a woman to talk to girls, and a man to talk

to boys. The instruction should not be hit and miss, as one happens to think of a possible subject, but there should be a regular course, laid out in detail, assigning certain topics and illustrative stories for a series of years. General chapel talks more often seem to miss the point than strike at the root. Such subjects should be both corrective and constructive, to tear down wrong attitudes and build upright desires and determinations. The final aim should be to create manliness and womanliness.

The teaching of good morals should be incorporated into the chapel talks, schoolroom conduct and habits, out-of-school habits, shop work, games, and leisure time. Morals are learned only by practising them day in and day out in every line of action. Moralizing often has just the opposite effect. If one brings two magnets together, positive pole to positive pole and negative to negative, the magnets refuse to work. There is no attraction. The positive and negative poles attract each other with an invisible magnetic power. Most moralizing should be indirect and concrete, putting an offender in a position that he does not enjoy in the eyes of his schoolmates.

Our nation is more composite now than it was in the early days. In our school one can find nearly every nationality of Europe—Italian, Pole, Slovak, Jew, Lithuanian, Serbian, Swede, German, Dutch, Scotch, Irish, English, and Greek. In each of these homes, the folks keep alive to a certain extent the love of their old nationality, which naturally shuts the child out from a great deal of American patriotism. We have had a close-up view of European living such as the tourist folders never describe. We learn to value our American institutions of lib-

erty, social life, popular government, higher education, and opportunities of life and culture by contrasts.

The final product of several years of instruction and training should be the ability to think for one's self and to stand up for what is right. Much of the drilling-in of knowledge is rote work, but it should lead to new thoughts. Too much simplifying tends to too much childishness. There should be an insistent demand that boys and girls must assume mature thoughts on certain subjects. The ingenuity that correlates facts into final results or new problems demonstrates the growing mind. Few attain this power to a high degree, but all knowledge should be grasped and used and applied to daily good citizenship.

There are as many obstructions to the attainment of intellectual and moral character as there are in turning out a flawless bit of work in a mill. Some material does not lend itself readily to construction. The proposition is to find the way, each in his own locality. Our work is to look after Americanizing the deaf youth.

ELMER D. READ,
Instructor in the Western Pennsylvania Institution,
Edgewood Park, Pennsylvania.

SIMPLIFYING THE SIMPLE

An old friend of mine—one of the most interesting men it has ever been my privilege to know among teachers of the deaf—used to say in speaking of his work that his chief business in life was to simplify the simple. I think that is a very good description of our work, or of what it ought to be. I think that, although we should be loath to acknowledge it, the majority of us are rather attracted by simplicity and clearness of expression both in oral and written language, no matter whether the subject be simple or difficult. Only the other day I picked up a little paper which is published especially for children, and in it I found an ingenious little bit of self-advertisement of its popularity not only among its juvenile readers, but also among the grown-ups. It was headed "Time Table of the Day When My Magazine Comes Home."

9 a. m. Grandpa finds it on the breakfast table and skims it over for two hours.

11 a. m. Auntie opens it and keeps it till lunch.

2 p. m. Grandma finds it and simply cannot fall asleep.

3 p. m. "Admirable for the kiddies," says Uncle, and peeps at it for two hours.

5 p. m. Mother looks through it and lets the tea get cold.

6 p. m. Kitty picks it up and is happy when Father comes home, "Ah, my magazine! Kitty and Tommy, on with your lessons!" He reads till eight.

8 p. m. Tommy and Kitty: "Daddy, do you know that is our magazine?"

"Too late now, children. It would keep you awake all night."

Tommy and Kitty get up early next morning, quietly abstract it from under Daddy's pillow, and are perfectly happy at last.

I am not, and never have been, one of those who attribute poor results in the education of the deaf generally, and in the teaching of language in particular, to the fact that we do too much for our pupils —that we make things too easy for them, that we do not teach them to help themselves. On the contrary, my experience has been that we do not make things plain enough, that we have not succeeded in reaching the minds of our pupils, that much of what we thought was perfectly plain to them, was very imperfectly understood, and in some cases altogether incomprehensible, that instead of leaving a lasting impression on their minds, we have simply soared over their heads. It is *so* easy to do that. It is so easy to forget that our pupils are deaf. A great statesman in correcting some erroneous impression that he or some one else had made upon his audience explained that the speaker had been carried away by the exuberance of his own verbosity. I think that we oral teachers are sometimes likely to be carried away by the exuberance of our verbosity. It is easier to talk than to say something, and if we do not succeed in reaching the minds of our pupils we shall fail to accomplish what we set out to do— to simplify the simple and to try to make our pupils think.

This is the phase of language teaching that I would like to touch upon in these remarks. It's a long, long trail that lies before the teacher and the pupil when they set out to explore the mysteries of language, and there are so many interesting by-paths that it is not possible in an article of this kind to go

far beyond the border of the subject. These few thoughts that I am setting down are the results of my own personal observation and experience. Much of what I am going to say would appear to the teacher of normal children to be of such a trite and commonplace nature that it would seem altogether unnecessary to pay any attention to it. It might even be supposed that no allowance has been made for the intelligence of the pupil. All I can say is that the longer I teach the more I realize the importance of not taking any more chances than one can help, that in all our teaching we should do well not to take it for granted that our pupils understand many things which are self-evident to ourselves; in other words, that it is better to err in being too explicit, than it is to soar above them, and to forget our watchword, "Simplify the Simple." And by simplifying the simple I do not mean that we should be content merely to express everything in the simplest of language, with no particular object in view, to deal only with the known, and never make any attempt to proceed toward the unknown, to consider only the simple and never to make any advance to the complex. What I mean is that while it is necessary for us in teaching language to stoop to the intellectual level of our pupils and to make things clear to their understanding, every time we stoop we should try to raise them a step higher and lift them upward and onward.

During my early training as a teacher of the deaf we used to hear a good deal about following as far as possible the analogy of the hearing child. But when we come to consider the matter we find that the conditions under which the deaf child and the hearing child learn language are somewhat different.

In order to get a clear idea of the manner in which the two acquire language, it is necessary to compare their mental condition before education begins. And in doing so, a few psychological facts must be considered, and I don't think I can do better than to quote what Mr. Frank H. Hall, the well-known author of mathematical works, said some years ago. I have not as yet seen the subject dealt with in any clearer manner. In discussing the "Relative Value of Sight and Hearing in Mental Training," he said:

Thinking is discerning relation and relation is discerned by comparison. The objects compared are images, not the objects themselves. The first effort of the mind is to bring these into consciousness. It is usually more difficult to bring into consciousness the things related than it is to discern the relation. So, the great task of the teacher is to lead the child *to image*. Asking the child to tell relation is one of the teacher's methods of testing the quality of imagery. Good imaging generally insures good discernment of relation. Defective imaging results in wrong notions of relations. Bad teaching is often the result of insisting upon the child's telling relation when he has not in consciousness the thing or images of the things related. In the case of the normal infant it comes largely through the sense of sight, trained and supplemented by the sense of touch. In the first year of a deaf child's life, possibly in the first fifteen months, sight aided by touch seems to outrank hearing as a means of mental training. It is just possible that inherited mental ability being equal, the deaf child at fifteen months is mentally the superior of the blind child of the same age. But from that time on, the advantages so far as mental operations are concerned, are emphatically with the child of darkness. True, the deaf child may obtain a certain class of sense images with much greater facility than the blind child. But these images—images that are brought into consciousness through external

objects present to the senses—are not the images which are chiefly employed in mental effort—in effort to discern relation—in other words, thinking.

By far the greatest number of the images of thought must come into consciousness without the immediate presence of the external object. These may come to the child when alone, through association in a chain of thought. The parent attempts to bring these images of thought into the consciousness of the child through some suggestive sign, usually a word symbol. So it happens that the normal child of six years old has had an enormous amount of practice in imaging absent objects, when their symbols are presented to the senses. It is noteworthy in this discussion that nearly all the symbols that cause the images of absent objects to come into the normal child's mind are presented to the ear.

The hearing child learns language from his mother and from those around him just as the necessity for its use arises. The easy and the difficult, the simple and the complex are, as it were, thrown indiscriminately at the child's mind. What he can assimilate sticks, and what he cannot falls back to be gathered up and thrown again. The child unconsciously associates, classifies, compares, contrasts, and assimilates these word symbols, and by continual repetition, in course of time, gets all his material for the expression of thought arranged on the shelves of his mind in a perfectly orderly manner.

A psychologist has told us that we need to have everything labelled for us, and that if we lost our stock of labels we should be intellectually lost in the midst of the world. Now this appears to be the mental condition of the deaf child before his education begins. He is intellectually lost in the midst of the world. We cannot say, however, that he has

lost his stock of labels, for he was never in possession of them. It is a part of our work then to supply him with his stock of labels and help him to arrange them in an orderly manner. To quote Mr. Hall again:

> The deaf child, under ordinary circumstances, is deprived of this training in imaging in early life. He becomes familiar with a few suggestive notions and attitudes addressed as symbols to the eye. Chain of thought must play some part in his mental activity. But, mainly, during all his wakeful hours, the external appeals that come to him, come not through symbols, but through the objects themselves. He spends his time and mental energy in seeing and touching. The greater part of his imaging is done under the stimulus of objects actually present to the senses. "The deaf-mute," said Dr. J. L. Gordon, "revels in the endless panorama of sense perception and is but little given to reflecting and to logical thinking. The eight-year-old deaf-mute possesses seemingly excellent vision. He sees much and quickly with his natural eye, but he is almost blind in his mind's eye. The endless panorama of sense perception has occupied his time, and engaged his mental strength to the neglect if not the entire seclusion of the panorama of the imagination. With eyes of possible unnatural keenness he is far below the normal child in ability to compare, to think. * * * The congenitally deaf child of eight years, who has received no systematic training, is an infant, not simply because he does not know language, but because he has not received the training which comes from symbols—training in bringing images into consciousness at the bidding of a symbol or a sign."

It would occupy too much time to review and compare the various methods of teaching language in our schools for the deaf, but the one great fault common to most of them seems to me to be that they

have been too mechanical and have failed to give the pupil the necessary practice in imaging, or, in other words, they have failed to develop the power of thought. The amount of imaging and symbolizing to be done by deaf pupils is of such vast extent that the teacher must show them how to economize their time and mental energy. My own observations have led me to the belief that the weakest spot in ordinary methods of language teaching is not the elementary or primary stage, although possibly something might be done even here to develop more thought. The place where we all seem to begin to make slow progress—to mark time, as it were—is that stage when the child has assimilated a certain amount of colloquial language and has arrived at the point where he is able to write in fairly correct English a simple letter or composition, or can read stories in simple language. We succeed, I think, in producing fairly successful results up to that point, but when the pupil begins to deal with the language concerning things which are beyond his immediate interests and surroundings, when we begin to place books in his hands—that is the time when it seems to me that the rate of progress begins to be retarded. Language at this stage appears to me to be in a very chaotic state and it is only a comparatively small proportion who are able to emerge successfully from the confusion in which they find themselves engulfed, and it is to be feared that in some cases they do so in spite of, rather than in consequence of, the teaching.

At this stage, we find that very often a good deal of attention is paid to the study of technical grammar. Now, while I think that it may be of interest to the pupil to extend his observation to an elemen-

tary study of the subject—that the letters of the alphabet may be divided into vowels and consonants and that all the thousands of words in the dictionary may be classified into eight kinds, or parts of speech, together with some of their inflexions, I think it is highly desirable that this phase of grammar, if it may be so called, should be introduced, but I cannot see what good can come from the study of grammar in the sense of mere analysis. Of what profit is it to a deaf child to attempt to teach him to dissect or to analyze a sentence before he knows how to construct one? To attempt to teach language to the deaf through the study of technical grammar seems to me to be nothing less than a wicked waste of time.

One of the best means for the development of language is the use of the material which we can all find surrounding us in the every-day life of the pupil—*incidental teaching,* as we call it. In the hands of a skilful teacher, this is a mine of wealth which can be used with the most profitable results. Such teaching is based upon the soundest of principles. We begin with the known and proceed to the unknown. We can lead our pupils by easy stages from the simple to the complex. The daily life of the school can be made a kind of microcosm of the world. It is an unfailing source of supply for the teacher of language, yet how little do we realize its importance. We and our pupils are too busy with our text-books to stop and take notice of what is going on around us. We are so much concerned with the unknown. It reminds me of the visit to a school for the deaf that was made by a well-known teacher who died some years ago. He saw the work being done in the various classes and finally came to the highest class of pupils in the school. They were doing history or

geography, and were giving remarkably correct and intelligent answers. The visitor watched the work with interest. Then he said, "I should like to give just a little test in language." Consent being given, he glanced around the room, and seeing a pitcher which had a hole in the bottom of it, he took it, held it up before the class and asked the pupils to write down what it was. The answers that he got were rather remarkable. "There is jug in bottom of hole," and "The bottom has a hole in the jug," etc. As I have just said, we don't realize how easy it is to soar over the heads of the pupils, to ignore the material for language teaching that lies about us, and to spend all our time and attention on things of secondary importance. "It was one of the sagest of the old philosophers," says a modern writer, "who sent a note to the schoolmaster asking that the boys be given a holiday in order that they might learn something."

It is generally agreed that the one great object that we all have in view is to teach our pupils to read with intelligence and profit. There are those who tell us that the deaf can most easily acquire a knowledge of language through reading. That is true, but a good foundation must first be laid by the teacher of language. No one has greater faith in the efficiency of reading than myself, but it is one thing to read a book and another to understand it. When walking around a room full of deaf boys, each with a book before him, it is not difficult to distinguish those who are reading with pleasure and profit and those who are not. We can soon discover those who have gained the power to lose themselves in the story, those who are more slowly, but surely, making their way over the difficulties they encounter, and

those for whom the printed page has as yet but little or no interest.

"What do you read, my lord?" asks Polonius in the play of "Hamlet," and Hamlet replies, "Words, words, words." This is what a large proportion of pupils in our schools for the deaf are doing to-day. They read words, words, words, so many symbols with but little knowledge of relation. What is the reason for this state of things, and what can be done to remedy it?

We frequently find that pupils have scarcely any knowledge of getting the meaning of a sentence as a whole or of discovering the significance of a word or phrase by its relation to the context. As we know, much depends upon the manner in which the pupil's knowledge of language has been built up. If he has been taught language on a parrot-like plan, consisting of a great deal of dry-as-dust drill work, affording him little or no opportunity to exercise his reasoning powers and express his thoughts in living language—if he has been allowed to drift into a merely mechanical habit of dealing with words something after the manner of counters, with scarcely any thought behind them, we need not be surprised to find that when the time comes for him to take up some simple book, he is utterly incapable of understanding what he reads. In such instances we nearly always find that a too liberal use has been made of synonyms in teaching—as a matter of fact, with many of us, the synonym is often the only resource, consequently pupils who have been accustomed to this treatment constantly try to interpret language by means of synonyms without any association of ideas, and think that no explanation can be complete without the familiar sign of equality. Such pupils

read on till they come to an unfamiliar word or phrase, and being unable to grasp the meaning from its setting in the sentence, go either to a teacher or to a dictionary for assistance. The result is not always satisfactory. Let me give you a simple example. The following appeared in the *Maryland Bulletin* two or three years ago, I think.

Pupil: "What is the meaning of equal?"

Teacher: "The same."

The pupil, writing his usual letter home: "I am quite well and hope you are equal."

Another little instance I remember: A pupil had asked his teacher to explain the meaning of the word "repent," and he was told that repent means "sorry," so a few days afterward, wishing to show that he had made some progress in language, he wrote, "A husband repents for his wife's death." Instances of this kind may be multiplied without number. It is well to be able to see the funny side of our work and not to take too seriously the comical mistakes that we see, but such cases as these seem to me to be too serious to be lightly regarded.

It is not sufficient to teach a deaf child the synonym or mere dictionary definition of new words and expect him to understand their meaning well enough to use them himself. This practice of substituting one word for another, playing with words instead of dealing intelligently with the ideas they represent, has placed a stumbling block in the way of many a pupil and has caused him to regard language as an unintelligible puzzle. Every new acquisition must be joined to some other fact already in the mind. It must be associated with something before it will stick, and if that association is made it matters little whether the actual synonym or definition is learned

or not. Here, then, we must know how to simplify the simple and it is not always an easy thing to do. I often wonder why we don't give more thought to what has been called the philosophy of language. There is no more interesting subject upon the face of this earth. To me, it is the most attractive feature of the work; without it, to teach the deaf would be a most uninteresting task. It is not an easy thing to find a suitable example or illustration in explaining the meaning of a word, and unless we have made a study of it we cannot always on the spur of the moment find a suitable setting. One day, not long ago, I was teaching history. The class was one of average ability. The book we were using was Montgomery's Elementary History of the United States. The chapter we were studying was on the Settlement of Virginia, and we had arrived at the point where representative government was introduced. Our book stated that there were eleven settlements in the colony and that two representatives were chosen from each settlement, and that the law-making body of twenty-two men held their meetings in the little church at Jamestown. There was a picture on the opposite page showing these representatives on their way to the church. All of which would present little or no difficulty to the average hearing child. But not so with us.

The first obstacle was the term "representative." It would have been easy enough to look up this word in the dictionary. If the pupils had done so they would have found something like this: "Representative: fitted to represent; bearing the character or power of another. One that represents another. An agent or substitute who supplies the place of another. A member of the lower house in a legis-

lature or in Congress. A deputy." "The dictionary," as the Scotchman remarked, "is very interesting, but a wee bit disconnected." I might have gone to the wall slate and tried to write some simpler synonyms of the term "representative"—it would have saved a good deal of time, but I did not adopt either method.

I asked the pupils if they would all like to go to the movies on Saturday afternoon. They all said, "Yes." I counted all in the class and asked if they would all go to the Superintendent's office to ask for permission to go. They said no, only one would go. I asked why they would not all go to the office. They said, "Too many." I asked which pupil they would choose, and they named one, a good speaker. I then wrote on the slate, "Marian would go to the office instead of all of you. Marian would be the —— of the class." I then supplied the word representative. After that I further illustrated the term by calling attention to the Legislature at Harrisburg, a fact with which they were all familiar. I asked them how many people there were in Pennsylvania. They said about seven or eight millions. I asked them to guess how many women and children there were in the state and how many voters. Then I asked if all the men in Pennsylvania would go to Harrisburg to make the laws. They said "No." I asked why. They said, "Too many." I then returned to the subject of the lesson and went over the statement regarding the representatives of the colonists of Virginia, and I asked them if they understood the meaning of it, and they said they did. Turning to the picture on the opposite page, I asked the class what the building was. They said it was a church. I asked them why the men were going into the church.

To this, I received only two or three vague answers. One said, "To worship God." I asked them on what day people go to church. They said, "On Sunday." I told them that I thought the picture showed the men going into the church on a week day. They did not at first grasp the meaning of a week day, so I wrote the names of the seven days of the week, bracketed the six working days, and wrote the name "week days" opposite. I told them that the twenty-two representatives of the people of Virginia were going into the church to hold a meeting. I asked them if the boys and girls ever held meetings, and where and when they held them. They told me that the Athletic Association held a meeting in our chapel once a month. I asked them what the men were going to do in the church and one or two said to make the laws. Just as I was passing on to the next paragraph one pupil asked me the meaning of "representative," showing that she had not been accustomed to this form of explaining language.

A slow and tedious process some may say. It may also be remarked that it should not be necessary to stoop so low in order to reach the mind—that the teacher should give his pupils more opportunity for the exercise of their own efforts and dig for themselves. The answer is that unless we are willing and able to take this trouble we shall never get far in our work, and if we are not willing and able to simplify the simple we shall not make any lasting impression on the minds of our pupils. We have all heard the story of how Abraham Lincoln sought for the meaning of the word *demonstration;* how he looked up its meaning in the dictionary and was not satisfied with the explanation given there. Finding that it was a mathematical term, he was not

content till he had procured a book of Euclid and studied that subject until he had satisfied himself that he had mastered the true meaning of *demonstration.*

One morning last winter when I went into my classroom and began work, the first thing I did was to go to the wall slate and write "To-day's paper says that colder weather is coming here. Yesterday the temperature in Winnipeg was four degrees below zero." I took down the thermometer and showing it to the class asked each one to tell me the temperature of the room. Each one answered correctly, saying that it was 68 degrees. They did not all say degrees at first, but by questioning I got it from all. I told them to open their geographies and find Winnipeg, and they did so. I asked them what province it is in. This was an unfamiliar term to them, so I explained it and then told them to look at the maps and name the provinces of Canada and write them down in turn on the wall slate. I asked them to name the largest and the smallest. They named British Columbia as the largest, but Prince Edward was not distinct enough for them to see, so I had to help them out. After noting the shape of the province of Manitoba I asked what state lies south of it. Then I went back to the slate and read what was written there regarding the temperature at Winnipeg. I took up the thermometer and, as the pupils came one by one to the table, I asked each one to show me zero. Only one of them was exactly right. After locating zero I asked them to show me four degrees below zero and they did so. I showed them that the mercury had sunk to that point in Winnipeg and all of them appeared to realize that it was very cold. They did not know, however, the name "mer-

cury" or "quicksilver," and I told them that. I held the thermometer over a hot radiator and let them see the mercury rise. Hanging it up again by the window I let them see the mercury fall. Going to the slate, I wrote "When the air becomes warmer the mercury rises and when the air becomes colder the mercury goes down." Leaving a space below I wrote: "The mercury rises and falls *according to* the temperature." Calling the attention of the class to the two sentences, I counted the words in the first paragraph, and found there were eighteen, and in the second paragraph below it there were only nine words. I told them that the two meant the same thing and asked which was the better and they said the shorter one. I then called out four or five boys and arranged them in line according to their height, after which I wrote a sentence on the slate to match the action. I then rearranged them according to their age and wrote that sentence on the slate. By this time the period had come to an end. Two or three of the pupils remarked that the time had gone quickly. Now, my work that term was to teach geography and history, but I fear that I often trespassed on the domain of the teacher of language; in fact, I never lost an opportunity to do so. Some teachers may object to this style of teaching on the ground that the teacher is likely to wander away from the subject entirely and never get anywhere in particular. The success of such teaching depends upon the teacher. Judging from my own experience I know that whatever success I may have met with has been along these lines.

To return for a moment to the subject of reading. I think it was Dr. Bell who said that when once we have succeeded in getting a deaf pupil to read, we

have "got" him. But just how or when this desirable point may be reached does not appear to be settled. Some have gone so far as to assert that for the acquiring of language, reading is all-sufficient—that we may almost abandon language teaching altogether. Hearing children may perhaps dispense with formal language lessons and depend entirely upon reading, and probably the semi-deaf and even the semi-mute, but there the concession ends. I have no faith whatever in the idea that congenitally deaf children in school simply have to keep on reading and that by and by all will come right.

It has often been said that as the hearing child learns language through the ear by constant repetition we should give the deaf child a similar language environment, and reading has been recommended as a substitute for this constant repetition. But the congenitally deaf child will not always learn language through repetition, neither will he learn to read books so as to understand them without the necessary mental training. The hearing child hears and reads a great deal that at the time he does not fully understand, but by dint of constant repetition the meaning gradually dawns upon his understanding. He thus unconsciously classifies, associates, compares, and contrasts ideas and the symbols by which they are represented. It takes him some time to get through the process, but he does it unaided. In the case of the congenitally deaf child, shut off from the sound of the human voice and all that this deprivation implies, the conditions are altogether different. In order to compete with his hearing brother with any chance of success, the deaf child must have these processes of classifying, associating, comparing, and contrasting made clear to him by

his teachers before the latter can hope to get him caught in the wheelwork of mental machinery and thus enable him to read with pleasure and profit.

I believe that it is quite within the range of possibility to concentrate and intensify our teaching by the adoption of a method based upon more scientific principles than those at present in vogue, so that we may, to some extent, make up to the deaf child the effect of the constantly repeated language heard and assimilated by his hearing brother.

In our profession, we are very apt to accept every innovation that comes along and hail it as the long-looked-for solution of our difficulties. Lectures on psychology may be very entertaining to us teachers of the deaf, but if we took the lecturer into a classroom and said, "Here is a class of deaf children. Kindly teach," we know very well that he would be absolutely at sea. There is no royal road to acquirement of language. It is not of the slightest use to expect help from outside sources. It will be well for us to bear in mind the fact that while we are seeking here and there for our object, it is, as has been said of the kingdom of heaven, "within us."

JAMES A. WEAVER,
Superintendent of the Austine Institution,
Brattleboro, Vermont.

AN APPEAL TO AMERICAN SCHOOLS FOR THE DEAF

THE PENNSYLVANIA INSTITUTION
FOR THE DEAF AND DUMB,
Mt. Airy, Philadelphia, Pa., JANUARY 7, 1921.

TO AMERICAN TEACHERS OF THE DEAF:

The appeal for support as set forth in the accompanying circular issued by Miss Charlotte R. Willard, Principal of the Anatolia Girls School, at Marsovan, Turkey, speaks for itself, and must touch the hearts and sympathies of all American teachers of deaf children. From information received personally at the hands of Miss Willard, we feel the story is but half told, and have no hesitation in advising American teachers of the great needs of the Marsovan School, and in asking them to respond as generously as may be to Miss Willard's touching appeal for assistance. Without help, Miss Willard's efforts in behalf of the deaf of the Turkish Empire must cease. This must not be permitted. We appeal to every school for the deaf in America, and to every teacher, to respond promptly to this great opportunity for services to humanity, by sending their contributions to Mr. Lyman Steed, as Treasurer, Wissinoming Hall, Mt. Airy, Philadelphia. Mr. Steed will forward all funds contributed in response to Miss Willard's appeal to her address in Boston, and will report from time to time through the institution press regarding the success of the movement.

Respectfully yours,

CAROLINE A. YALE, *Northampton, Mass.*
A. L. E. CROUTER, *Mt. Airy, Philadelphia.*

DEAR FRIENDS:

Some fifteen years ago we yielded to the urgency of a Greek mother and received into our primary school at Marsovan, Turkey, a little deaf-mute boy. The child proved to be very bright, but soon had

learned all that the teacher of hearing children could give him. We then planned to send him to some school for the deaf in Turkey. Inquiry convinced us that there was no such school in the Empire. Then we thought to send the child to Greece, as he was of Greek parentage, and again, we learned that in all Greece, there was no school for the deaf. This brought to us a realization of the hopeless condition of such children in that Near East country and with this realization came the pressure to in some way provide for their education.

It was not easy to make any feasible plan for the development of these children, but ways were opened, and in 1910 a school was opened in Marsovan (400 miles east of Constantinople). It had two small buildings, a playground of its own, and a modest outfit of furniture and school equipment. A fine start was made. The school grew and became the most fascinatingly interesting place on our big American premises. In 1914 we had seventeen pupils, two teachers, three teachers-in-training, a house-mother, a master carpenter, and a teacher of weaving.

But the war brought disaster. Half of our children could not get back after the summer vacation, our house-mother died of typhus in those days when this disease swept the country, one of our teachers, our master carpenter, and our weaver perished in the great deportations. The teachers who remained were needed for many kinds of emergency work. We held the remnants of our loved school together until there came a time of comparative safety in 1919. Then, having only exhausted teachers, a few children, no money, and buildings which had been used for the housing of soldiers sick with every

disease which came in the wake of war, we were forced to close the work for the deaf for a time.

Two things are now needed for the reopening of this school—money and an American teacher to be its head. These silent, hopeless children look to us alone and we cannot fail them.

May we ask the American schools for the deaf to help us? An annual gift of $1,200 would meet the expenses of an American teacher. This amount will cover not only salary, but cost of outfit, travel, and language study. Can you take a share of this amount with the plan to give it annually for five years in semi-annual payments?

We ask you to remember that this is the only school for the deaf in the Turkish Empire and that it receives no grant from any organization, but is entirely dependent on personal subscriptions for its support.

Earnestly hoping for your coöperation,

CHARLOTTE R. WILLARD,
Principal, Anatolia Girls School,
Marsovan, Turkey.

Address:

MISS CHARLOTTE R. WILLARD,
CARE WOMAN'S BOARD OF MISSIONS,
14 BEACON STREET, BOSTON, MASS.

INDIVIDUAL DIFFERENCES MEASURED BY PSYCHOLOGICAL TESTS

In two previous articles we have described in the main the more practical results of a mental and educational survey, showing how such results have a direct bearing upon the specific problems of school management, methods of teaching, and the teacher.[1] In this article it is proposed to summarize the results of the tests in so far as they bear upon problems of more theoretical interest, namely the comparison between the congenitally and the adventitiously deaf, between the two sexes, and between the deaf and the hearing child. None of these questions can be said to have specific bearing upon actual school work, but all of them will help us to understand the deaf child better.

The Congenital and Adventitious.—Table 1 gives a distribution of the congenital cases on the non-language test according to age. In each age group the totally and partially deaf are given separately. From the medians found at the bottom of the table we find the congenitally totally deaf showing a higher median at ages 8, 9, 14, 16, and 19. In all other ages the congenitally partially deaf have the higher medians. The entire congenital group, separated into total and partial, shows medians of 48.5 and 49 respectively, while all congenitals together have a median mental index of 48.5. This would seem to indicate that a congenitally deaf child does not profit at all from his slight hearing as far as development of general intelligence is concerned.

[1] *Annals*, November, 1920 (vol. lxv, no. 5). *Annals*, January, 1921 (vol. lxvi, no. 1).

TABLE 1.—DISTRIBUTION OF CONGENITALLY DEAF ON THE NON-LANGU

Index—	Age 8		9		10		11		12		13		14		15		16	
	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P
0–19					1	1	3		2		2		3		4		1	
20–39		3	5	1	8	3	15	5	21	5	30	8	29	8	30	5	19	8
40–59	7	3	12	6	21	14	35	8	56	12	56	18	69	15	50	14	41	5
60–79	1	1	8	3	8	7	23	4	19	5	17	13	34	4	32	9	18	4
80–100			1			1	1	2	2		2	1	1		2		1	
Total	8	7	26	10	38	26	77	19	100	22	107	40	136	27	118	28	80	17
Median	51	42	52.5	47	48.5	51.5	52	53	49.5	51	46	55	52	42	47.5	54	47.5	42
Total	15		36		64		96		122		147		163		146		97	
Median	44		49		50		52		50		49.5		48		49.5		45	

TABLE 2.—DISTRIBUTION OF CONGENITALLY DEAF ON THE EDUCATION

Index—	Age 8		9		10		11		12		13		14		15		16	
	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.
0–19									1		2	1	5	1	4			1
20–39	3	3	10	2	10	6	18	3	27	5	31	8	25	8	31	8	25	4
40–59	4	1	9	6	18	15	36	13	52	10	61	11	76	12	54	11	38	7
60–79	1	2	7	2	10	5	23	3	19	7	11	20	29	6	29	8	17	4
80–100		1							1		2		1			1		1
Total	8	7	26	10	38	26	77	19	100	22	107	40	136	27	118	28	80	17
Median	51	51	46	45.5	48	47	50	47	48	52	46	57.5	48	43	47	50.5	49	54
Total	15		36		64		96		122		147		163		146		97	
Median	51		46		48		49.5		50		49		47		48.5		52	

TABLE 3.—DISTRIBUTION ON THE NON-LANGUAGE TEST AC

Index—	Age 0–1		1–2		2		3		4		5		6		7		8		9		10	
	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.
0–19	7	1	3				1															
20–39	32	15	15	4	23	12	21	6	4	4	7	1	3	1	2	2	1	1			1	
40–59	88	35	41	11	61	34	41	26	24	13	14	10	12	4	14	6	6	4	1	4	4	
60–79	35	19	26	4	44	16	24	12	13	4	8	6	9		9	6	5	1	1		3	
80–100	1	2	2	1	3		2				1		3	1			1					
Total	163	72	87	20	131	62	89	44	41	21	30	17	27	6	25	14	13	6	2	4	8	
Median	49	53	51	51.5	52	51	53	50	54	55	53.0	56	55	52	52	50.5	59	51	61	53	55.5	2
Total	235		107		193		133		62		47		33		39		19		6		9	
Median	50		51		52		52		54.5		54		53		52		55		53		55	

TABLE 4.—DISTRIBUTION ON THE EDUCATIONAL TEST AC

Index—	Age 0–1		1–2		2		3		4		5		6		7		8		9		10	
	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.
0–19	4	1	1	1			1	3							1							
20–39	43	15	16	5	27	8	13	9	6	3	3	2	1	1	1	2		1				
40–59	85	36	52	8	75	33	44	19	25	11	15	8	10	1	9	2	2	2		2	1	
60–79	30	20	18	6	28	18	29	14	10	5	9	6	11	3	12	9	8	3	2	1	6	
80–100	1				1	2		2		2	3	1	5	1	2	1	3			1	1	
Total	163	72	87	20	131	62	89	44	41	21	30	17	27	6	25	14	13	6	2	4	8	
Median	49	54	50	53	51	52	54	52	55	48	51.5	55	65	70	61	68	75	59	73.5	62	71	3
Total	235		107		193		133		62		47		33		39		19		6		9	
Median	51		52		52		54		53		53		65		62		71		71.5		70	

Non-language Test According to Total or Partial Deafness

16		17		18		19		20		21+		Total				
C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.T.	%	C.P.	%	Total.
	1		1		1	2			1		1	20	2.0	3	1.0	23
5	19	8	11	3	14	2	11	2	5		8	3	206	24.0	56	23.0	262
14	41	5	34	10	24	3	13	1	8	4	11	5	437	51.0	118	49.0	555
9	18	4	7	5	9	1	10	1		1	1	1	187	22.0	59	25.0	246
	1		1		1								12	1.0	4	2.0	16
28	80	17	54	18	48	7	36	4	13	6	21	9	862	100.0	240	100.0	1,102
54	47.5	42	48	51	48.5	50	50	42	43	53.5	44	49	48.5		49		48.5
3		97		72		55		40		19		30					
9.5		45		50		48.5		46		51		47					

Educational Test According to Total or Partial Deafness

16		17		18		19		20		21+		Total				
.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.P.	C.T.	C.T.	%	C.P.	%	Total.
		1	2			1		1		1		17	2.	3	1.	20
8	25	4	12	7	10	2	13	1	5	1	10	2	230	27.	60	25.	290
11	38	7	33	8	29	3	14	3	7	4	10	7	441	51.	111	46.	552
8	17	4	7	3	9	2	8			1			170	20.	63	26.	233
1		1											4		3	1.	7
28	80	17	54	18	48	7	36	4	13	6	21	9	862	100.	240	99.	1,102
50.5	49	54	47	45.5	46	49	47.5	52.5	40	50.5	38	47	46.5		49.5		47.5
3		97		72		55		40		19		30					
8.5		52		46		46.5		51		45		44					

ge Test According to Age When Deafness was Acquired

9		10		11		12		13		14		15		Unknown.		Total			
A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	%	A.P.	%	Total.
														3		14	2.	1	0.	15
	1	1	1	1	1	3					1			13	6	124	18.	58	19.	182
4	4			2	1	3	1	1	2	2				26	9	340	49.	160	53.	500
	3			2		2	2	1	1			2		12	4	196	28.	75	25.	271
														1		14	2.	4	1.	18
4	8	1	5	2	6	6		2	3	2	1	2		55	19	688	99.	298	99.	986
53	55.5	23	58	43	47.5	44		53	55	48	36	65.5		47	51	51.5		50		51
6		9		7		12		5		3		2		74						
3		55		54		47.5		55		43		65.5		48						

l Test According to Age When Deafness was Acquired

	10		11		12		13		14		15		Unknown.		Total			
A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	A.T.	A.P.	%	A.P.	%	Total.
		1				1				1				3		12	2.	3	1.	15
						1		1						12	5	122	17.	54	18.	176
2	1					1								27	10	345	50.	134	45.	479
1	6		3	2	5	4	2	1	2		2			13	3	190	28.	95	32.	285
1	1		2		1			1							1	19	3.	12	4.	31
4	8	1	5	2	6	6	2	3	2	1	2			55	19	688	99.	298	100.	986
62	71	31	71	74	70	67.5	69	79	68	28	70			54	48	55		51		53
3		9		7		12		5		3		2		74						
1.5		70		71		68.5		69		65		70		52.5						

Table 2 gives the same kind of distribution of the congenital cases on the educational test. On examination of the medians in this case we find the total and partial groups having the same medians at age 8. At ages 9, 10, 11, 14, and 17, the congenitally total groups have the higher medians, while at all other ages the partially deaf have the higher medians. The congenitally totals of all ages have a median of 46.5, while the congenitally partials have a median of 49.5. This difference is just what we might expect in educational attainment if the teacher makes use of the residual hearing. Whether still more use of this residual hearing could be made and thereby increase educational attainment is a question to be raised. The whole congenital group has a median educational index of 47.5.

The conclusion to be drawn is that the slight degree of hearing which a congenitally deaf child may possess gives him no consistent advantage educationally, from age to age, but on the whole the congenitally partially deaf child has a slight advantage over the totally deaf individual. Also, the congenital group as a whole is not attaining educationally quite so high a median as it is mentally.

Table 3 gives the distribution on the non-language test, according to the age when deafness was acquired, of the adventitious cases. The first column gives the indices; the second column, the distribution of children becoming deaf at one year or under, according to whether they are totally or partially deaf. Cards marked "deafness occurred in early infancy" were included in this group. The second column includes all cases becoming deaf at 13 months up to and including 23 months; the next column "deafness occurring at two years of age," and so on up to

"deafness occurring at 15 years of age," The next column gives the indices of a group of children, marked "unknown" when deafness occurred. The next two columns give the totals for total and partial deafness, and the last column the final total.

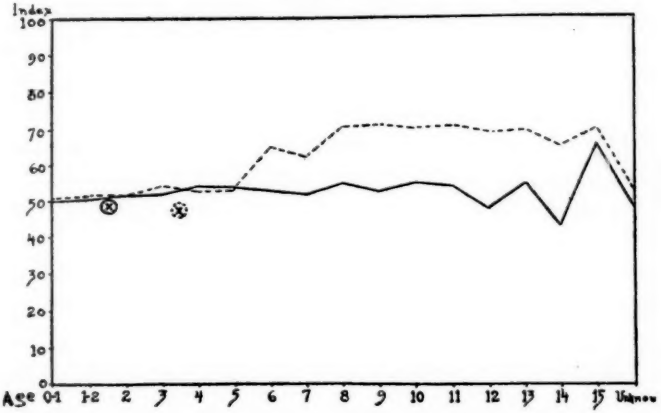
The medians for the total and partial acquired deafness also vary in the different ages when deafness was acquired as they do for the different chronological ages among the congenitally deaf. Ages 1 year and under, 13 months to 23 months, 4 years, 5 years, 13 years, and the "unknown" group show the partially deaf to have a higher median index; but combining all ages of acquired deafness in two groups of total and partial, we find the children who have acquired total deafness showing a slightly higher median mental index. But the difference of 1.5 points between the two indices is too slight to indicate any real difference in mental ability.

Table 4 gives a similar distribution for the children on the educational test. Here we find ages 1 year and under, 13 months to 23 months, 2 years, 5 years, 6 years, 7 years, 11 years, and 13 years, showing a higher median for the partially deaf than for the totally deaf, among those acquiring deafness. However, the median for the whole group of totally deaf is 55, while for the partially deaf it is 51. The median index for the adventitious group as a whole is 53.

On the non-language test the medians from age to age cluster about 50, but on the educational test there is a very marked increase in the medians from ages 6 to 15, the "unknown" group again dropping back to a median similar to those for children losing their hearing early in life. Thus, as has been pointed out before, they more nearly resemble the congenitally deaf.

Figure I shows a curve of the medians for each age of adventitious deafness, with the median for the "unknown" group last. The solid line represents the non-language medians. This practically straight line is just what we would expect, if our tests are a good measure of native ability. Acquired deafness would not affect innate ability, unless the cause of deafness was a disease which would bring about some degeneration of the central nervous system.

FIGURE I.—MEDIAN INDICES FOR EACH AGE OF ADVENTITIOUS DEAFNESS



The dotted line represents the educational medians. Here our results would seem to indicate that retaining hearing up to the age of 5 years makes no difference worth mentioning in educational attainment over native ability. However, the retention of hearing up to the age of 6 years would seem to cause a decided rise in our curve. Again, at the age of 8 years there is a rise to another level, which is almost smooth up to the age of 15 years. The "unknown" group, coming last in the curve, drops

to medians similar to those for children acquiring deafness in very early life.

The cross with the broken-line circle around it indicates the educational median (47.5) for the congenitally deaf group. The cross within the solid-line circle indicates the median index (48.5) on the non-language test for the congenitally deaf. On both series it is to be noticed that the medians for the congenital group are lower than the medians for any age of acquired deafness.

We may sum up these results by saying that as a group both the congenitally deaf and the adventitiously deaf are found to be doing roughly what they are expected to do; that the congenitally deaf on the average are slightly below the adventitious in mental ability; that they are appreciably below the adventitious in educational attainment; and that among the adventitious the possession of hearing up to the age of six has a very significant bearing upon the future educational attainment of the child.

Sex Differences.—We need spend little time in the discussion of this topic because the results are negative.

We find with reference to the numbers of the two sexes that the males predominate. This has been noticed in many reports and in all census returns.

With reference to the tests we find that the median mental index for the boys is 51 and for the girls 49. The overlapping is, of course, very great, and the difference of two points has little significance. On the educational test the median for the boys is 51 and for the girls 50, which to all intents and purposes are the same.

Our conclusion would be that if there is even a slight mental inferiority among deaf girls, it is com-

pensated for by some other factors, and that they attain as much educationally as the boys. The mental inferiority of deaf girls as a class is, however, very slight, even if it really exists. If it does really exist to the slight extent indicated by our measurements, then a very slight excess on the part of the girls in such factors as greater conscientiousness in school work, greater docility in school, greater interest in academic subjects, a greater degree of obedience to their teachers' injunctions would readily account for the equal educational attainment shown by the girls.

These results, based upon a much larger number of deaf children than have been previously tested, confirm the conclusions of Pintner in his previous tests in that they show no sex difference either in mental ability or in educational attainment.

Comparison of Deaf and Hearing Children.—Before the use of standardized measurements the deaf as a class were considered as having the same general intelligence as hearing people. It is perfectly true that many deaf people have innate ability which far exceeds the mentality of many hearing people. Gradually, however, we are coming to recognize that deafness on the average is accompanied by a somewhat lower degree of general intelligence.

In the case of congenital deafness, the inferior mentality and the lack of hearing are probably due to some common cause, which is an inherited defect.[2] Added to this original defect, is the fact that certain brain centers may never develop because they have never been used. With adventitious deafness the

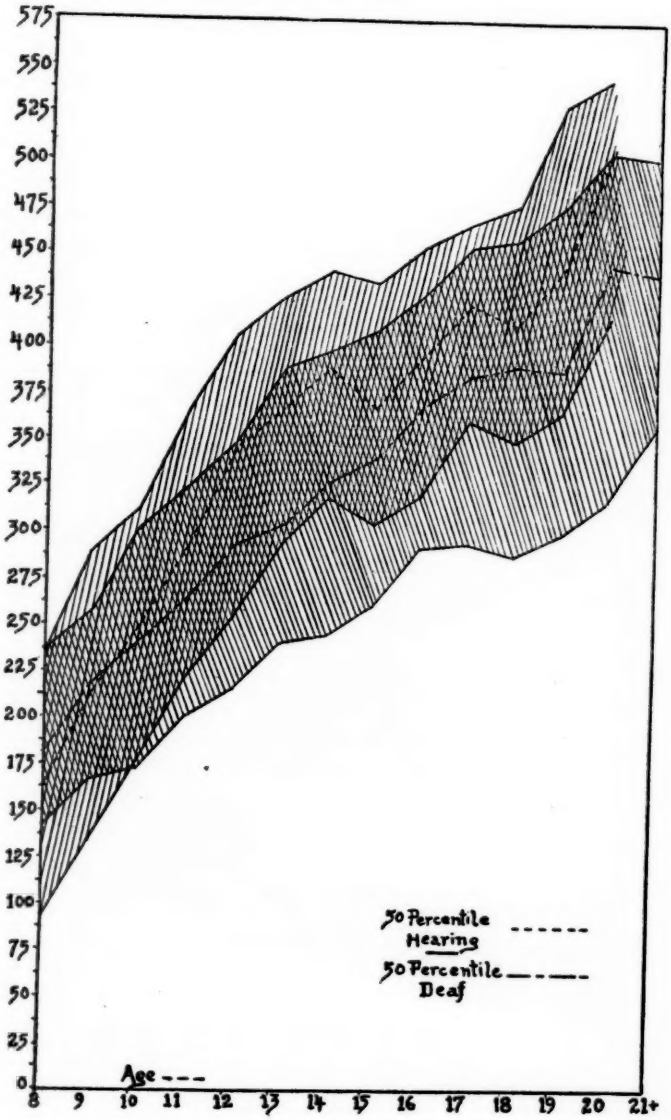
[2] Pintner, R., and Osborn, D., "The Mentality of Families of the Congenitally Deaf," *Annals*, March, 1919 (vol. lxiv, no. 2), pp. 96-134.

brain centers probably have developed, since considerable growth occurs in pre-natal life and in the first few years after birth.

The various tests reported by Pintner and his collaborators have always shown the deaf inferior to the hearing. The amount of retardation has been variously estimated as from two to four year on different types of tests. Again the results of the present survey bring out the inferiority of the deaf as compared with the hearing in spite of every attempt being made to arrange adequate tests for deaf children, in which respect we consider that we have been entirely successful.

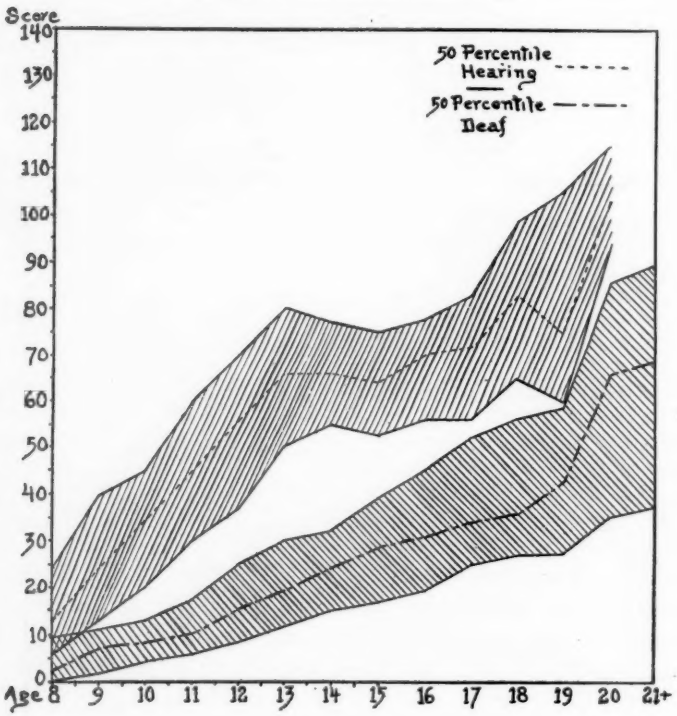
Figure II gives a picture of the quartiles for the hearing and the deaf children on the non-language or mental test. The solid lines indicate the 25 and 75 percentiles, while the broken lines indicate the medians for the two groups. We find that the 75 percentile for the hearing group is at every age higher than for the deaf group. The 75 percentile for the deaf at three age group is only equal to the 50 percentile for the hearing, but at all other ages lies above the median for the hearing. Ages 8 and 9 show slightly higher medians for the deaf than for the hearing. The 25 percentiles for the hearing are lower at these ages than for the deaf. This is accounted for by the better sampling of hearing children at these ages. The deaf at these lower ages are selected cases, that is, those who have passed beyond the first grade in school. The cross-hatched section of the curves indicates the degree of overlapping of the deaf and hearing on the mental test. The variation in the two groups is about the same, although at the higher ages the variation is greater for the deaf.

FIGURE II.—QUARTILE DISTRIBUTION OF HEARING AND DEAF CHILDREN ON THE NON-LANGUAGE TEST



In Figure III we have a very different picture. This time the quartile scores on the educational tests are indicated. In only one age do we find any overlapping. This occurs at age 8 where the 75 percentile for the deaf is slightly higher than the 25 percentile for the hearing group. The variation at each age is less for the deaf than for the hearing up to age 15; then it remains about equal or greater than for the hearing. This bears out the earlier findings that the deaf are below the hearing educationally at

FIGURE III.—QUARTILE DISTRIBUTION OF HEARING AND DEAF CHILDREN ON THE EDUCATIONAL TEST



all ages. The difference at ages twenty and twenty-one-plus probably is not so great as would appear from our curves because of the fact that the norms for the hearing at these ages are based largely on scores made by university students and professors. These scores are, undoubtedly, higher than they would be if we had a less selected group.

Following the suggestion offered in one of Pintner's articles we have given below the grade in a school for the hearing in which we would find the average deaf child of any given age judging from his score on the educational test.

THE DEAF CHILD ACCORDING TO GRADE STANDARDS FOR THE HEARING

Chronological Age.	50 Percentile Score.	Educational Grade Rating for the Hearing.
Median 8 makes	2, corresponds to	—II
Median 9 makes	7, corresponds to	II+
Median 10 makes	8, corresponds to	II+
Median 11 makes	10, corresponds to	II+
Median 12 makes	15, corresponds to	III
Median 13 makes	19, corresponds to	III+
Median 14 makes	24, corresponds to	III+
Median 15 makes	28, corresponds to	IV+
Median 16 makes	31, corresponds to	IV+
Median 17 makes	34, corresponds to	IV+
Median 18 makes	36, corresponds to	IV+ or V
Median 19 makes	43, corresponds to	V
Median 20 makes	66, corresponds to	VII+
Median 21+ "	68, corresponds to	VII+

The first column gives the chronological age. The second column gives the 50 percentile score (according to norms for the deaf) for each chronological age. The third column shows about the grade in schools for the hearing, making the median corresponding most closely to the median for the deaf at each chronological age.

For purposes of comparing the grade standing for the deaf and the hearing we are including the following table:

GRADE STANDING OF HEARING CHILDREN ON EDUCATIONAL TEST

Chronological Age.	50 Percentile Score.	Grade.
8	13	III
9	24	III+
10	34	IV+
11	45	V+
12	56	VI+
13	66	VII+
14	66	VII+
15	64	VII—
16	70	VII+
17	72	VIII—
18	83	XII
19	75	VIII
20	103	XII

The slower progress of the deaf is very much more evident from this table since more than one age group of deaf children would fall within any one grade of a school for the hearing. Only the two oldest age groups of deaf children attained a rating equal to the seventh-grade ability of hearing children. This means that part of the hearing children are from one to five grades ahead of the deaf group, although the hearing are by no means so superior on the mental test.

Our conclusion, derived from comparing the average grade scores for the hearing children with those for the deaf, is that on the whole the deaf would be three and a third grades below hearing children of the same chronological age.

For conversion of the median educational scores for the deaf into educational ages according to the norms for hearing children on the educational test, the following table is presented:

EDUCATIONAL AGES FOR THE DEAF ON THE EDUCATIONAL TEST ACCORDING TO NORMS FOR THE HEARING

Chronological Age.	Median Score.	Educational Age of Hearing Children.	Difference.
8	2	6 years 6 months	1 year 6 months
9	7	7 years 4 months	1 year 8 months
10	8	7 years 5 months	2 years 7 months
11	10	7 years 6 months	3 years 6 months
12	15	8 years 1 month	3 years 11 months
13	19	8 years 6 months	4 years 6 months
14	24	9 years	5 years
15	28	9 years 5 months	5 years 7 months
16	31	9 years 10 months	6 years 2 months
17	34	10 years	7 years
18	36	10 years 1 month	7 years 11 months
19	43	10 years 10 months	8 years 2 months
20	66	13 years	7 years
21+	68	15 years 6 months	5 years 6 months

Average 5 years.

The first column gives the chronological age and the second column the median score for deaf children at each age. The third column shows the educational age according to norms for the hearing on the educational test, for a child making the given score. The last column gives the differences between the chronological and educational age. An average of these differences shows a retardation, in educational age, of five years for the deaf child.

The next table gives the mental age for each median non-language age score for the deaf according to standards for the hearing:

MENTAL AGES FOR THE DEAF ON THE NON-LANGUAGE TEST ACCORDING TO NORMS FOR HEARING CHILDREN

Chronological Age.	Median Score.	Mental Age.	Difference.
8	180	8 years 6 months	+6 months
9	219	9 years	
10	242	10 years	
11	262	10 years 6 months	6 months
12	292	11 years 1 month	11 months
13	302	11 years 5 months	1 year 7 months
14	325	11 years 7 months	2 years 5 months
15	338	11 years 9 months	3 years 3 months
16	369	13 years	3 years
17	383	14 years	3 years
18	389	14 years	4 years
19	387	14 years	5 years
20	446	19 years	1 year
21+	440	18 years 6 months	2 years 6 months

Average Difference 1 year 10 months.

The first column gives the chronological age and the second the median score on the non-language test for each age. The differences between chronological age and mental age are given in the third column.

The average retardation in the case is a little less than two years. This is not as great a difference as Pintner has found in most of his results, while the five years' difference on the educational test is considerably more.

In conclusion, therefore, we note that the deaf as a group are retarded on the average two years mentally and five years educationally. The mental retardation is probably inherent, due to the lowered mental ability of the group, and it would, therefore, account for two of the years of educational retardation. The other three years of educational retardation must be accounted for by other factors. Undoubtedly the greatest of these is the lack of auditory experience, and one is tempted to assume that it is a complete explanation. We must not, however, forget other possible factors, such as quality of teaching, regularity of attendance, age when beginning school, amount of physical illness, and the like. We have not made any exact study of such possible factors. From personal observation, however, we should be inclined to rule out quality of teaching, which seems to be every bit as good in schools for the deaf as in schools for hearing children. Regularity of attendance would seem as good, if not better, in schools for the deaf as compared with schools for the hearing. As to comparative amounts of physical illness we have no data. There remains, however, age when beginning school. Here there is a marked discrepancy between the deaf and the

hearing. The average age for the hearing child is six or six and one-half years. The deaf child rarely enters schools before the age of eight, and in many cases not until the age of nine. Here, therefore, is a possible additional cause for the marked difference in educational accomplishment, which may help in part to explain the excess amount of three years' educational retardation. We say "in part," because undoubtedly the great element in this excess of three years' retardation is the language handicap.

Summary.—We shall not attempt at this stage to summarize all the points brought out by our survey of schools for the deaf. Those who wish a more detailed account must be referred again to the monograph by Reamer.[3]

We wish, however, to emphasize the value of these surveys not only in helping us in the practical work of school management, but also in giving us a broader and deeper knowledge of the mental make-up of the deaf child. We believe that the present survey has thrown light upon many important subjects pertaining to the deaf child, and we are convinced that by continuous and persistent endeavor along this line we shall reap an abundant harvest.

RUDOLF PINTNER AND
JEANNETTE REAMER,
Ohio State University,
Columbus, Ohio.

[3] Reamer, J. C., "Mental and Educational Measurements of the Deaf." To appear in the *Psychological Review Monographs*, Psychological Review Publishing Company, Princeton, N. J.

REPORT OF SECRETARY OF THE CONFERENCE OF SUPERINTENDENTS AND PRINCIPALS OF AMERICAN SCHOOLS FOR THE DEAF

A special meeting of the Conference of Superintendents and Principals of Schools for the Deaf was called at the Pennsylvania Institution, Philadelphia, on Thursday evening, July 1, 1920, at 9:30 p. m., Mr. Isaac B. Gardner presiding. Mr. J. W. Jones, Chairman of the Committee on Standardization of Schools for the Deaf, reported as follows:

Proposed scope of a survey of the state schools for the deaf for the purpose of determining standards by which such schools may be classified:

1. Location: Adaptability to carry on the work in the most efficient way. Accessibility.

2. Buildings: Comfortable housing with reference to roominess, sanitation, including heating, lighting, ventilation, etc. Also kinds and quality of buildings to do the work of education and custodial care in the best way.

3. Grounds and lands as to opportunity for expansion and for manual and industrial training: Playgrounds, gardening, orcharding, farming, etc.

4. Domestic and Custodial: Proper grouping of children with sufficient supervision to care properly for the person of pupils, their personal habits, clothing, beds and bedding, toilets, manners and morals, and all other things that go to make up a first-class family life. Cooking service, feeding, cleaning. Social life, religious and moral training. Laundry and laundry work, wardrobing and dressing, and preparing for school.

5. Organization as to Sufficiency and Proficiency: Spirit and purpose. Its origin and direction.

6. The Educational Department: Its management and tendency. Classification records and equipment. Course of study, extent of work, the end in view, its adaptability to train for life work or self-maintenance.

Industrial training: Extent and kind. Its adaptability to the needs of the pupils in their respective communities. Graduation.

The training of a teaching and supervising force, salaries, libraries, laboratories, physical education, including child study, and all that goes to develop the mind and body of child life.

7. Medical and Hospital Department: Equipment in every way and extent for taking care of epidemics, etc. A system and equipment for eye, ear, nose, and throat cases.

8. Farm land: Farming, dairying, testing, feeding, etc., when a farm is owned.

9. Plan for the retirement of aged and worthy teachers and employees of long terms of service.

10. Management as to controlling authority, such as one board for many institutions, a single board under an educational sentiment, or otherwise.

The committee wished to ascertain whether or not the Conference was in earnest in the matter of proceeding with some form of standardization. It was moved by Mr. Jones and seconded by Mr. F. M. Driggs that the matter be again referred to the joint committee in charge, with power to act. The motion was discussed by Dr. A. L. E. Crouter; whereupon Dr. A. H. Walker proposed a substitute to the effect that the work of standardization be placed in the hands of the Executive Committee of the Conference of Superintendents and Principals (frequently referred to as the *Annals* Committee) with full power to act. The substitute motion received a second, and was discussed by Dr. M. A. Goldstein, Dr. Percival Hall, Dr. N. F. Walker, Messrs. Driggs and McManaway. Upon call for a vote, the substitute motion failed of passing; and the original motion, placing the matter again in the hands of the joint committee, was passed.

Meeting adjourned forthwith.

IGNATIUS BJORLEE,
Secretary of the Conference.

A MESSAGE TO AMERICAN TEACHERS FROM THE NATIONAL COLLEGE OF TEACHERS OF THE DEAF OF GREAT BRITAIN

SCHOOL FOR THE DEAF AND THE BLIND,
The Mount, Stoke-on-Trent,
DECEMBER 14, 1920.

Dear Dr. A. GRAHAM BELL:

The National College of Teachers of the Deaf, taking advantage of the much appreciated visit you paid to its Executive on December 11, would like, through you, to send a message to their colleagues of the United States, and, as Chairman of the National College, I shall be deeply grateful if you will consent to be the bearer of this message.

The National College of Teachers of the Deaf of Great Britain extends, on behalf of its members, to the teachers of the deaf throughout America, its heartiest greetings, and begs to assure them of its high regard and appreciation of the earnestness and progress which mark their work. British teachers of the deaf are most grateful for the very helpful literature provided by the American journals for the deaf and contributed thereto by American teachers. This literature is followed in every school in Britain and has a very valuable influence on the teaching given in them.

During the last decade, many movements for the improvement of the teaching of the deaf have been initiated in this country, and it may be said that this period has seen the closest approximation to scientific truth that has ever existed in our work. We know that in America similar movements have been

taking place, and we should like to acknowledge the powerful aid we have received from the accounts and papers in the American press.

Your visit to English teachers of the deaf has seemed to them to be the outward and visible sign of those inward and spiritual ties which unite teachers of the deaf the world over in the sacred cause of liberating souls imprisoned by deafness, and we should like, therefore, to express our sense of brotherhood with our American colleagues in a work which knows no boundaries of nations, but is as wide as humanity itself.

Yours sincerely,

(Signed) A. J. Story,
Chairman of the N. C. T. D.

Whether she will or no, the teacher is bound to study the laws which govern her pupils' actions, and to meet and alter them or coöperate with them, as the need may be.

The efficient teacher is an economist to the last degree. Waste of effort means division of power. The child whose enegies are not used to the best advantage suffers not only a loss but an injury, for a prodigal habit is strengthened with every exercise of it. The mental faculties should be kept in order. Precision, system, and neatness are the expression of an orderly mind.

The question we must always keep in mind is: What are we trying to do with these children, and how are we going to do it? We want to develop in them faculties that will enable them to take care of themselves capably and happily in the least expensive way.

The chief use of psychology in every activity of life is to produce economy of effort, and to enable the subject to adapt himself to his environment. In manual labor the psychologist has learned to eliminate waste of movement. Investigation in the simple matter of shoveling has proved that by wise economy of movement and suitable tools one hundred and forty men can do the work of five hundred in a given time. In education, likewise, psychology may have a very practical use in producing efficiency. The term efficiency as applied to the deaf is for the most part a relative one.

The names of the faculties to be developed, and the usual methods to employ are not new to the

teacher. Yet an interchange of ideas on these points would lead to practical results.

Let us consider for a moment the cultivation of memory. It is a fad of the hour among teachers to decry the practice of committing a memory lesson. And yet is not the evil of this practice due often to a wrong kind of lesson given by the teacher? Memory is the chief faculty in education. The shell-shocked soldier with a loss of memory has almost a useless mind until his memory is restored.

Suppose, in giving a memory lesson, the language in it had been previously used in an attractive way by the children, and had produced a response in them. You would have an enthusiastic, correct, and orderly rendering of the lesson under normal conditions. You thus cultivate the memory, strengthen the mind, and give the children something definite to do. However, question work, lip-reading, picture stories, and all such work not only depend upon the memory, but also help to develop it. And we must never forget that childhood is the time for storing up in the mind, just as maturity is the time for reasoning.

The development of the other faculties—of instinct, perception, imitation, attention, will, and others, depends almost wholly upon interest, upon the appeal of the stimulus, the power of which is limitless. All the skill, ingenuity, and imagination of the most prolific mind would not be too much for this work. Interest is the burden of our song. The psychologist learns the reasons why certain kinds of things produce interest. Knowing the qualities of human nature, he learns how to appeal to them. It is human nature to love novelty, to follow and

imitate the crowd, and to copy from those who are older or who are considered superior. Children like incidents related to familiar things.

In preparing work for the children from day to day the teacher keeps all of these human qualities in mind. And she meets the children half way, or more than half way. She coöperates with them. She reaches to their plane, their point of view. She gets out of her work exactly the quality she puts into it, and nothing more. Hence she must keep fit in every sense.

There is no topic so interesting to the teacher as the psychology of stimulus. No small part of this is the influence of atmosphere. A child of bad tendencies may be almost or altogether reformed by being seated near his teacher and feeling the force of her personality, or by having only the better pupils of the class seated near him.

There is a knack in teaching. It may take only weeks, or it may take months to find it. It consists perhaps more than anything else in having a spirit of good will between teacher and pupils. They tell her their inmost feelings and seek her approval. There exists a desire for coöperation and comradeship.

The only way we can study a person's mind is by observing his actions under varying conditions. Children of like mind, tastes, abilities, ambitions, and desires will respond favorably to certain stimuli. Knowing what these are, we know best how to make our appeal.

We should seek to draw from our pupils the expression of what we wish to teach them. What we tell them should be done in a sense of coöperation,

or of helping them to help themselves. They like to think an idea occurred to them rather than to have had it told to them. We notice this quality in children of a larger growth.

It helps us to get the child's point of view to remember that he thinks largely in pictures. Although taught purely orally, a child who begins his education at six years must have formed the habit of thinking in pictures. We should try to keep in mind what thinking in pictures, rather than in spoken language, must mean to a child. This, we must remember, accounts for many of his idiosyncracies. With the deaf we must get at causes through a study of symptoms.

One other thought. Children must be taught to love work for work's sake, for the joy of achievement; otherwise they are not fitted for life as it is. Real work is largely drudgery. Yet there is no real joy in life without it. By contrast it makes the bright spots of life brighter. And, let us remember, we are teaching our children to know life as it is. No normal person is inactive. The useful person is he whose activities have been trained into the right channel. If work is worth while it is worth doing efficiently. Why waste our time or that of our children in doing it any other way?

The pioneer work of teaching deaf children consists in fitting them to use text-books as other children do. It is a long struggle to overcome their abnormality.

Too much attention cannot be placed upon the importance of grading—grouping children of like capacity so that the teacher need not waste time in preparing different work for different children. A

wrongly graded child is a handicap to the teacher, to the rest of the class, and, most of all, to himself.

It is a present-day theory that we teach by analysis rather than synthesis, by giving subject matter as a whole, and then resolving it into its component parts. With the deaf, however, we get more accurate results if we teach both ways, the component parts being taught first unconsciously, then woven into a composite whole, and resolved into its parts again.

The greatest success in lower grades is attained through a skilful use of materials, of pictures, objects, and models, and through incidents of deep interest.

JENNIE L. COBB,
Instructor in the Western Pennsylvania Institution.
Edgewood Park, Pennsylvania.

STANDARDS AND DIRECTIONS FOR LIP-READING COURSES [1]

1. *Men Requiring Courses.*—All men suffering from hearing disabilities who are unable to understand conversation in an ordinary tone of voice at a greater distance than five or six feet should be given a course in lip-reading.

In cases where the hearing is reduced bilaterally 50 per cent, the man will be greatly benefited by a course in lip-reading, though it may not be absolutely necessary for him to have it in order to carry on.

In cases of total deafness in one ear and normal hearing in the other, lip-reading should not be given, though such disability in itself may constitute a vocational handicap, depending upon what the man's former vocation may have been.

In judging the advisability of lip-reading for a case, the district offices should depend upon the following:

(a) A late report of a competent aurist giving the man's exact ear findings.

(b) A practical test made by contact officers, speaking to the man with the mouth covered.

(c) Prognosis for recovery. If the prognosis of a man's case is unfavorable, his deafness is likely to be of a progressive form. He should then be provided with lip-reading, even though he has less than a 50 per cent reduction of hearing.

---

[1] Issued by the Division of Vocational Rehabilitation, Federal Board for Vocational Education, Washington, D. C., primarily for guidance in the work of reëducating deafened soldiers who have been discharged from the service.

2. *Length of Courses.*—A man's ability to master the art of lip-reading depends on the following:

(a) His natural aptitude for the work.

(b) The training, experience, and ability of the teacher.

(c) The amount of intensive individual work given.

(d) The man's physical condition.

(e) The practical use the man makes of lip-reading during the hours when he is not under instruction.

(f) The character of the man's vocational course.

Army statistics show that the average length of time for the course in the army school was three months, with the men receiving from two to three individual lessons per day. Federal Board statistics show that the average length of time for the lip-reading course has been from four to six months. One man with a natural aptitude for lip-reading became proficient in twelve weeks; another, after fifty lessons. Others have been under instruction for more than a year.

Men should be approved for a three months' course, and the extension should be allowed on the recommendation of the teacher or school.

While every man should have a thorough drill and much supplementary practice, the courses should not be unnecessarily prolonged. When the fundamentals have been thoroughly covered and a great deal of supplementary practice has been given, frequent repetition of the work becomes a matter of routine and the man gains but little of practical value. His hope is to work continually trying to read the lips of those with whom he comes in daily contact.

3. *Lip-reading as Pre-vocational Work, or as a Major Course.*—If the man takes lip-reading as pre-

vocational work, or if the lip-reading is regarded as a major course and he is able to devote morning or early afternoon hours to this work, his progress should be much faster than if he takes lip-reading concurrently with a heavy vocational course. For men who are totally deaf, it is most desirable that they should have at least three months, and in some cases more time, devoted entirely to lip-reading before attempting other work. When other work is taken up, lip-reading should be regarded as a major course until they have attained the greatest degree of proficiency possible.

4. *Degree of Proficiency Attainable.*—On completion of a course in lip-reading, a man should be able to understand speech easily when the speaker's mouth is in a good light and his speech is distinct, not too rapid, and otherwise normal. Most lip-readers find the speech of men difficult to understand, due, largely, to the fact that many men wear mustaches and speak with very little lip movement. The excellent lip-reader can follow not only conversations, but lectures. The average lip-reader cannot do this.

Many men have been able to acquire this art unconsciously. There are in training under the Federal Board at least a dozen men who have mastered lip-reading through their own efforts. The proficiency of such cases can easily be determined by speaking with the mouth uncovered, and then by speaking with the mouth covered.

5. *Methods.*—Three methods of lip-reading are used in this country: the Müller-Walle, or Bruhn Method; the Nitchie Method; and the Kinzie Method. More depends on the teaching ability of the teacher and on the men than on the method used.

6. *Cost of Instruction.*—The average price paid for individual instruction throughout the country has been $2 per lesson of an hour's duration. In certain locations more has been charged, in others less. Many schools have given group or practice work without charge to Federal Board students. A nominal sum has been charged by other schools and instructors.

7. *Making Arrangements for Instruction.*—In entering a man for instruction, the following points should be thoroughly understood by the teacher with whom the contract is made:

(a) The man must have at least one hour of individual work per day.

(b) This work must be given by a trained teacher of experience, and not by an instructor or student who has been engaged for practice work under supervision.

(c) A report on the man's progress must be made once a month to the staff member in the district office in charge of these cases.

(d) Irregular attendance on the man's part or lack of effort must be reported immediately to his local office.

The work of teaching congenitally deaf children is entirely different from the work of teaching lip-reading to adults, and in making arrangements for tutorial contracts with teachers at the various state schools for the deaf, inquiry should be made as to whether or not the teacher under consideration has had any training or experience in adult work.

Teachers should be chosen with due regard to personality, as well as training and experience. The Board is, to a large extent, dependent upon the recommendations made by the teacher. Any teacher who recommends an extension for men who do not need it, should be dropped from our accredited list.

Honesty and good judgment are essential qualifications.

8. *Statistical Report.*—Each district office is requested to furnish the following information on every case receiving this special training:

(a) "R" (rehabilitation) and "D" (district) numbers.
(b) Name of man.
(c) Military designation.
(d) Home address.
(e) Causes and degrees of impairment of hearing given in twentieths.
(f) Lip-reading and vocational training.

If this information is furnished promptly on each case, we shall be able to keep our statistical reports on this special group accurate and up-to-date.

9. *Text-books on Lip-reading.*—Teachers will recommend such text-books as they desire for the men taking lip-reading. The cost of text-books and supplies should not exceed $10.

In case a man is in a hospital or is bedridden and wishes to begin work in lip-reading, a simple text-book in the hands of his relatives or friends may be of value to him. The man obtains practically no benefit from reading such books himself.

The following are a number of standard text-books on lip-reading:

"Manual for Soldiers and Sailors," by Martha E. Bruhn.
"Müller-Walle Method of Lip-Reading," by Martha E. Bruhn.
"Lessons in Lip-Reading," by Edward N. Nitchie.

STANDARDS AND DIRECTIONS REGARDING CORRECTIVE SPEECH COURSES [1]

1. *Types of Speech Defects.*—Men suffering from speech defects or impediments should receive special training in corrective speech work. The following are the most common types of defects:

(a) Aphasia.

(b) Imperfect phonation caused by wounds or operations.

(c) Aphonia.

(d) Stammering or stuttering.

(e) Loss of control of tone or pitch due to deafness.

2. *Reëducation of Aphasics.*—There are two types of aphasia: motor aphasia and sensory aphasia. Men suffering from motor aphasia are unable to express themselves in speech. Men suffering from sensory aphasia are unable to understand the speech of others. In cases of complete aphasia, both memory centers and speech centers are affected. The chief causes of this trouble are cerebral hemorrhages and head wounds.

When the speech centers or memory centers are affected by cerebral hemorrhages, the man's recovery is largely a matter of time and of physical rehabilitation. When the speech centers have been destroyed by a wound in the head, his acquisition of speech is a matter of development of new centers through speech reëducation. Such a man must be

[1] Issued by the Division of Vocational Rehabilitation, Federal Board for Vocational Education, Washington, D. C., for use in the work of rehabilitation of men who acquired special speech defects while serving in the army.

taught to form his sounds, combinations, and words through conscious control of his organs of speech. A trained teacher is a necessity. Fortunately, only a limited number of men suffer from this disability as a result of the war's casualties.

The complete rehabilitation of such cases requires months of special training. When the use of speech sufficient to meet the practical needs of life has been gained, vocational training may be arranged for such a case.

Aphasia, when caused by a wound in the left parietal region of the head, is usually accompanied by right-side paralysis, and the man's training presents a double problem.

3. *Correction of Imperfect Phonations.*—Men who have tongue, jaw, or neck wounds are often unable to produce certain sounds and combinations. Such defects may be corrected and practically normal speech attained. Teachers who have taught speech to deaf children, as well as teachers who have worked with cases of defective speech accompanied by normal hearing, will be able to handle such cases.

4. *Correction of Aphonia.*—Aphonia, or loss of voice, complete or partial, may be the result of gas poisoning, of hysteria, or of laryngeal wounds or diseases.

When the aphonia is functional, that is, the result of hysteria or neurasthenia, *no special work should be given.* The reason for this is that such treatment more firmly fixes in the patient's mind the erroneous idea that he cannot talk.

Cases where the loss of voice is caused by tuberculosis or other laryngeal diseases, are not trainable for physical reasons.

Weak voices attributable to gas poisoning may be greatly strengthened by vocal exercises and gymnastics.

When the voice has been affected by wounds or operations on the various parts of the throat, excellent results may be obtained by training. Notable among such cases is that of a man in training (January 1, 1921) under the Federal Board, who had lost both vocal chords and was discharged from the service voiceless. Through proper training, the false vocal chords, or ventricular bands, have been made to function. The man is able to sing within the range of pitch which he can command and his voice and speech have become practically normal.

The voice of tracheotomy cases may be greatly improved and strengthened by vocal gymnastics.

5. *Training Voices Affected by Deafness.*—As a result of the loss of hearing the voices of many deaf men become affected. Control of tone or pitch may be regained through proper training.

Teachers who have taught deaf children orally and teachers of singing are best fitted to deal with these cases.

6. *Correction of Stammering and Stuttering.*—The majority of cases suffering from a speech disability belong to the class of stammerers and stutterers. Many of these cases had this defect prior to adolescence and suffered a recurrence or aggravation of their trouble while in the service.

Only teachers who have had special training and experience in the correction of these defects should be employed to handle these cases. Those who promise "an absolute cure" should be distrusted. A man who has been a chronic stammerer, who does

not relapse at times in moments of excitement or stress, is exceedingly rare.

There are numerous so-called methods for the correction of this defect and certain charlatanistic schools or institutions are widely advertised throughout the country. Various medical journals have, from time to time, exposed the methods of such schools.

Practically all the larger cities of the country, particularly in the east, west, and middle west, have established departments for speech improvement in their public-school systems, with trained teachers working under supervision. Information can be obtained from superintendents of schools regarding the training and fitness of such teachers for adult work.

7. *Cost of Instruction.*—The average price for speech correction has been $2 per lesson. These lessons should consist of individual work of at least an hour's duration. The men should have intensive work. Acute cases should be given no other vocational training until speech rehabilitation is complete.

8. *Degree of Proficiency Attainable.*—Possibly in no other course which the Federal Board arranges for its men, does the man's success in so large a measure depend upon his coöperation with the instructor, particularly where the course is given for the correction of stammering. It is impossible to state definitely how long the course should be, as each individual case presents its own problems. The Federal Board statistics show that the average length of time for instruction has been about three months, the man taking daily lessons. If a man has

received thorough training and has attained normal speech while under instruction, he should be able to keep up his practice work, and by means of exercises on which he has been drilled, to regain control in case of relapse.

9. *Making Arrangements for Instruction.*—In making arrangements for instruction, the training officer should have it definitely understood that the Board desires intensive, individual instruction and only such group work as will supplement the individual work.

10. *Statistical Report.*—Each district office is requested to furnish the following information on each case receiving this special training:

(a) "R" (rehabilitation) and "D" (district) numbers.
(b) Name of man.
(c) Military designation.
(d) Home address.
(e) Type of speech defect and cause.
(f) Speech correction and vocational training.

If this information is furnished promptly on each case, the central office will be able to keep its statistical report on this special group accurate and up to date.

11. *Books on Stammering and Similar Defects of Speech.*—The following authors of recognized standing have published books, pamphlets, or monographs on stammering, its causes, etc.:

Dr. C. S. Bluemel, Denver, Colorado.
Dr. Frederick Martin, 157 E. 67th St., New York City.
Dr. Elmer S. Kenyon, 104 S. Michigan Ave., Chicago, Ill.
Mrs. E. W. Scripture, Columbia Univ., New York City.
Dr. Robert Twitmeyer, Univ. of Penna., Philadelphia.

SCHOOL ITEMS

Austine Institution.—Miss Christine Meyers, from Miss Arbaugh's School for Deaf Children, Macon, Georgia, has recently joined the faculty of this school. A class in dressmaking, under the direction of Mrs. M. Williams, was organized at the beginning of the present term.

Gallaudet School.—Miss Elizabeth R. Russell has resigned to accept a position in the Louisiana State School. Miss Vera George Wolpert, who formerly taught in the Minnesota, Montana, and Arkansas Schools, has been appointed to the vacancy.

Horace Mann School.—Dr. Harry P. Cahill has been appointed otologist for the Boston public schools by the Boston School Committee. Dr. Cahill will have his headquarters at this school and will examine all applicants for admission to this school, and all pupils as often as seems wise. He will also make examinations in connection with the speech-correction work of the city.

Dr. Cahill is a specialist who has had a great deal of experience with deafened soldiers since 1914, both in Europe and our own country, and brings both skill and enthusiasm to the work.

Mississippi Institute.—Miss Maumee Roberts, of Birmingham, Alabama, formerly a teacher in the Alabama School, has been added to the corps of teachers.

A multi-tube has been ordered for a class of eight pupils who will be taught hereafter chiefly by the aural method.

One thousand dollars' worth of playground equipment has arrived and will be installed at once. This equipment consists of two thirty-foot slides, two giant strides, two six-swing outfits, and two four-board seesaws. One each of these pieces will be installed for the boys and one for

the girls. It is expected that this apparatus will keep the boys and girls, especially the latter, out of doors most of their leisure time and will furnish them plenty of healthful exercise.

More than a hundred new books, mostly juvenile, have been added to the library recently, giving the school now a library of at least three thousand volumes. Four daily papers and thirty-five magazines, as well as other publications, are also received.

Ohio School.—Miss Maria Cross, who had served as matron for twenty-seven years, was found dead in her bed on the morning of January 21, 1921.

Miss Elsie Kenney, teacher in the third primary grade, was taken seriously ill during the holidays and has been unable to return to her work. She is now with her sister's family in Florida and gradually regaining her health.

Typewriting has been added to the course of study and two of the senior girls are learning under the instruction of Miss Faye Wood.

The upholstering department has plenty of work to do this winter in repairing leather-covered furniture. The department is turning out good work.

The making of laundry baskets has become a prominent feature in our wood-working department. It has been difficult to get laundry baskets that would stand any length of time and it was also a waste of money as well as an inconvenience. The cabinet department therefore designed and constructed a basket which has stood the test of more than a year's hard use and which appears to be as good as ever. The State Board of Administration has ordered from the Ohio School enough baskets to supply all the state institutions. More than two hundred of these baskets have been made, for which the school receives $3.50 each. If other schools are having trouble with laundry baskets, the Ohio School would be glad to furnish them the necessary instructions so that they could make their own.

A joint resolution has been introduced in the legislature providing for a committee to consider the advisability of moving the School for the Deaf into the country. This committee when appointed is to report immediately to the present session, so that action may be taken if found necessary.

Oklahoma Industrial Institution.—The name of Monroe Ingram, who for many years has been a teacher at this school, was unintentionally omitted from the list of American Instructors of the Deaf as given in the last January number of the *Annals.*

Texas School.—On February 5, 1921, the State Board of Control announced the reappointment of Dr. Felix B. Shuford as Superintendent of this school. Dr. Shuford therefore enters upon his second term March 1, after having successfully completed the first two years of his incumbency. As is well known in the profession, not many superintendents of the Texas School have been retained when there has been a change in the state administration, and it augurs well for Dr. Shuford that he has received this distinction. He is no longer a new man to the profession, as his work here for the past two years and his attendance at the Mt. Airy Convention last summer have brought him into contact with the leaders in our work.

Arkansas Institute.—A clear statement of the present status of the Arkansas Deaf-Mute Institute is embodied in the Twenty-sixth Biennial Report of the institution, for the period ending September 30, 1920, submitted by the Superintendent, Dr. J. R. Dobyns, to the Board of Control for State Charitable Institutions of the State of Arkansas. It lays bare the limitations under which the school labors, conditions that are none too flattering to the authorities who are ultimately responsible for the education of deaf children in that state.

The most urgent need confronting the school is relief from the over-cramped situation that prevails in almost every department of the institution. At present children of all ages are huddled into the same dormitories. Dr. Dobyns urges that separate provision be made for the smaller children. Nor is there a building expressly set aside for school work. The classrooms for the instruction of the children are located in out-of-the-way places among the various buildings on the institution grounds. It is obvious that under such conditions it is quite difficult to obtain the best possible results.

That the institution does not enjoy the proper culinary facilities can be judged from this statement in the report: "Certainly the Legislature does not know that the meals for this large household have to be carried out in the open air from the rear of one of the largest buildings on the grounds, through sunshine, shower, sleet, snow, and biting winds, to be served in a dingy basement that was never intended for anything but a rough play room." During the fiscal year for 1920, the Arkansas Institute had 335 children to care for.

Dr. Dobyns pleads earnestly in behalf of better pay for his teaching staff, citing in support of his recommendation the fact that the cook in the kitchen "could not afford, from a financial point, to exchange with the teacher."

Insufficient appropriations by the Legislature have resulted in cutting short the school term. For the past four years the school year has consisted of only three hours a day for about thirty-two weeks, when it should have been, as Dr. Dobyns asserts, five hours daily for thirty-six weeks. The report adds, in comment: "No expenditure by the state for education brings back a larger percentage in the way of good citizenship than that made for the deaf. Is there one educated deaf man or woman of this state in the jail or penitentiary? If so, the management of the institute does not know it. Is there one in a county poor-house? If so, this institute has no knowledge of the fact. Educated deaf men and women to-day are holding their own in all kinds of business. Some of the most prosperous farmers in Arkansas are deaf men. How can the state afford not to give these children their full share of education or training?"

The report is a frank, fearless statement of the handicaps the school is burdened with, and Dr. Dobyns rightfully places the responsibility for their relief upon the Legislature of the state. May his recommendations be endorsed, and carried out to the full.

Clarke School.—Fifty-third Annual Report, for the year ending August 31, 1920.

In order to meet the increasing demands within the past few years upon the income at the disposal of the school, the Board of Corporators has voted to raise $300,000, to double the original endowment made by Mr. John Clarke when the school was founded fifty-four years ago. It is hoped, with the income derived from this increase in the Endowment Fund, to be able to keep current expenditures out of deficit, to provide increases in salaries, and to furnish the means for a limited number of scholarships both for pupils and normal students.

During the past year some changes were made in the curriculum where it deals with language work for the

upper classes and number work for the intermediate grades. Special emphasis, also, was given to the development of residual hearing. To aid in classroom reading exercises, two series of elementary story charts were prepared by members of the faculty.

In the year 1920, four new members were added to the Board of Corporators: Honorable Calvin Coolidge; Mr. John Skinner, of Northampton, Massachusetts; Mr. G. H. Grosvenor, president of the National Geographic Society, Washington, D. C.; and Professor Laura H. Wild, of Mount Holyoke College, Massachusetts.

Georgia School—The Fifty-fifth Annual Report of the Georgia School for the Deaf, covering the year 1920, appeared in the *School Helper* for February 9, 1921. In this report, also, great stress is laid upon the urgent need of more dormitory and school space, in the hope of inducing the state legislature to appropriate the money necessary for the erection of a primary building to care for the little children, who, as Mr. W. J. Griffin, President of the Board of Trustees of the the Georgia School, in presenting the Principal's report to the governor of the state, says, "should not be required to live with the older boys and girls. Our present dormitories are badly crowded and there are at least a hundred more deaf children in Georgia who would attend our schools if we had room for them."

Principal J. C. Harris places at 150 the probable number of deaf children in the State of Georgia alone who, if proper efforts were made to get them to school, could "be lifted from the pitiful and almost helpless condition to which deafness dooms them." As a primary fundamental of education, Mr. Harris points out: "It is our plain duty to go out into the highways and hedges of our state and compel the attendance of her children.

A study of the following fiscal summary, which gives the expenditures of the school during the year 1920, affords an interesting insight into the more practical problems involved in the education of the deaf child. It offers proof

that our schools "do a triple service for the child—they provide a home, a school, and a trade."

Teachers' salaries	$18,256.64
Officers' salaries	17,348.23
Extra help	127.61
Cured meats	845.29
Butcher's meats	1,830.65
Flour	1,552.16
Meal	306.80
Lard and Cottolene	782.15
Butter and oleomargarine	993.63
Sugar	720.01
Coffee	127.12
Sundry table expenses	7,956.60
House furnishings	1,644.51
Drugs	200.68
Fuel (coal; including freight and drayage)	7,033.99
Lights	368.29
Laundry	858.84
Stationery and postage	265.63
School (books and material)	297.57
Railroad fare of pupils, etc	1,504.22
Freight and express	627.57
Building material and repairs	1,355.06
Barn (feed for cattle)	2,827.56
Farm, garden, and stock	397.58
Tools and implements	59.45
Sewing department	1,543.77
Printing department	456.57
Wood-working department	15.25
Leather-working department	949.67
Burial expenses	15.00
Plumbing	135.96
Miscellaneous	3,059.81
Total expenditures	$74,463.87
Total amounts returned from sales, etc	2,337.46
Net expenditures	$72,126.38

Oregon School.—The Twenty-fifth Biennial Report of the Oregon State School for the period ending September 30, 1921, which Superintendent E. S. Tillinghast submitted

to the State Board of Control, as published in the *Oregon Outlook* for January 15, 1921, is comparatively brief but specific. The average of attendance for the two-year period was just about 100, a figure that might have been much higher if not for epidemics of influenza and smallpox during the first year.

The recommendation emphasized in the report as deserving greatest consideration is the provision for a material increase in the salaries of teachers of the school. Another great need is the modernization of the equipment of the institution for the teaching of industries. As part of this policy it is necessary to erect a new industrial building in order to do away with the makeshift arrangements that have been in effect for the past ten years. This new building, estimated to cost $30,000, could house the wood-working, the printing, the domestic science, and needlework departments.

Sarah Fuller Home.—The Thirty-second Annual Report of the Executive Committee of the Sarah Fuller Home for Little Deaf Children, Massachusetts, for the year ending June, 1920, from a review of the work done at this school, stands sponsor for the claim that it is best to have deaf children begin their education at the age of three, since "the impressionable age is between three and seven years."

Western Pennsylvania Institution.—According to the Report of the Trustees of the Western Pennsylvania Institution, the biennial period ending September 30, 1920, found the school financially in arrears. As was experienced by practically every school for the deaf in the country, the appropriations that had been received for the two-year period could not keep pace with the inflation in the price of commodities that followed in the wake of war conditions. It is to the credit of the school administration that, though confronted by the inevitable deficit, it decided not to curtail the term of instruction, nor to lower the quality of food served the children. Neither was the policy

of employing cheap or inferior labor adopted. The state legislature will, without doubt, promptly cover the deficit, as well as make liberal provision for the coming biennial period. Governor Sproul, in an address delivered at the Mt. Airy Convention last July, went on record with the promise to see that Pennsylvania's educational projects do not suffer in comparison with the practice of other states.

MISCELLANEOUS

Mr. Harding's Visit to the Florida School.—A correspondent detailed to a Presidential party must necessarily be one who is trained to grasp quickly the essentials in what he observes. The following special dispatch from St. Augustine, Florida, to the Washington *Evening Star*, February 26, 1921, is a striking illustration of the reaction upon such an expert of a visit to a school for the deaf. So far as President Harding and Dr. Walker are concerned, the narrative carries its own eloquence.

The human side of Warren G. Harding was revealed when he appeared unannounced on the platform of the Florida State School for the Blind, the Deaf, and the Dumb. A few years ago this school would have been called a home, where its afflicted inmates might have lived the remainder of their lives in indolence and mental misery. But under the new order of things it is classified as a school, and the young people attending it are preparing themselves to take an important and useful place in the affairs of the world.

When the head of the institution first came to the Harding headquarters and suggested that the President-elect come and make a few remarks to the children, George Christian, Mr. Harding's secretary, remembering that Mr. Harding has a second sister afflicted with blindness, thought it would be a good plan for Dr. A. H. Walker, principal of the school, personally to convey the invitation to the President-elect. In less than an hour after the interview had been arranged, Mr. Harding was on his way to the school. He was accompanied only by Dr. C. E. Sawyer, of Marion, his family physician; by the writer, and by Samuel T. Williamson, another correspondent.

The scene at the school was one not easily to be forgotten. Less than a mile outside of this ancient city, the school is surrounded by profuse Florida foliage.

Mr. Harding was in golf togs when he arrived at the school, and the silence as he was ushered into the auditorium was the impressive silence of an assemblage of those who could not speak or hear, or, speaking or hearing, could not see. There were children in the audience who were crippled, as if the loss of the senses of hearing, speaking, and vision were not affliction enough. Possibly the oldest students at this strangely silent school were sixteen years of age. There were others not more than three or four, some happily ignorant of their handicaps, and talking animatedly through the medium of

the language of signs, some with sad and lightless eyes. It required no stretch of the imagination to see how deeply Mr. Harding was touched as he sat on the platform, facing this unusual audience, and waited for as strange an introduction as a President-elect of the United States ever had. Dr. Walker, the principal, first introduced Mr. Harding to the deaf and dumb children, who predominated. His introduction was an eloquent exemplification of the sign-language.

The silence of the signs meant nothing, of course, to the blind students, so finally the principal spoke briefly to them, and at the end of the double introduction Mr. Harding arose. As he spoke his words were interpreted to the deaf and dumb by the school principal, who stood beside him. The expressiveness of the sign-language was brought clearly home to the onlooker. Once the dumb children were moved to applause, but the slightest gesture deterred them and they listened to the rest of the discourse in silence, and, although the next President stood before them, their gaze was fixed always, and necessarily, on the man who made the uttered words understandable to them.

Mr. Harding began in a sympathetic vein and spoke of the point of contact between himself and the children, the life work of a sister devoting herself to the education of the blind. He said he wished it were in his power to give the blind clear vision, and that he might return to the deaf and dumb their impaired senses. Quickly, however, he switched to a tone of optimism, and for five minutes or more he told the children of a bright future they could make for themselves.

There was no record made of the speech. No presidential stenographers were along. It was just a homely talk of optimism and helpfulness, and it revealed Warren Harding at his best.

An Appeal from Hungary.—A pathetic aftermath of the war is the great number of appeals from stricken Europe. American teachers of the deaf in particular are in receipt of many a plea for immediate aid by colleagues in schools for the deaf across the Atlantic. These cries are urgent, just as they are worthy.

The members of the faculty of the Institute for the Deaf and Dumb of Sopron, Hungary, ten in number, send this touching tale of distress:

The Instructors of the Institute for the Deaf and Dumb, Sopron, Hungary, greet their American Colleagues:

Your co-laborers of stricken Hungary ask for help. Sons and daughters of great and free America, only you can save us! Our

families hunger in misery, with insufficient clothing; our land is destitute.

Lend to each of us a hundred dollars. When poor, afflicted Hungary again raises its head we will repay in full, with interest.

(Signed): Csák Sándov, Faragó Béla, Hobler Rudolf, Kún Ernö, Lássló Gisa, Maár Fános, Meilner Mátyás, Takacs Gqula, Vas Fános.

We regret there is to be no important gathering of teachers of the deaf in this country in the immediate future. This would permit the presentation of such requests as given above, and the appointment of a representative committee to devise definite ways and means of proffering aid.

A Speech Difficulty.—The difficulty experienced in mastering the *k* and *g* sounds is not confined to deaf children. Sir Oliver J. Lodge, in "Raymond, or Life and Death," a book in which the eminent British scientist professes to be at times in direct psychic communication with his son Raymond, who was killed in action during the recent war, states:

Even an absurd difficulty he (Raymond) had as a child in saying the hard letters—the hard *g* and *k*—was markedly reminiscent of my own similar difficulty.

The Sense of Hearing in Infants.—Dr. E. Mather Sill, in his book on "The Child, Its Care, Diet, and Common Ills," is authority for this statement regarding the sense of hearing in infants:

When a baby is born it is usually deaf for about four days. The hearing gradually develops so that by the fourth or fifth week this sense is very acute and loud noises disturb the child.

Correction in the January Statistics of the Annals—In the tabular statement of American schools for the deaf as given in this year's January number of the *Annals*, the Wright Oral School is reported as having 5 pupils in Column B, the number taught wholly or chiefly by the Oral Method, and 45 in Column C, the number taught wholly or chiefly by the Auricular Method. These figures,

we are informed, should be reversed, namely, 45 pupils in Column B, and 5 in Column C. This correction also alters the totals in the summary for all the schools in the United States, making 10,376 pupils taught wholly or chiefly by the Oral Method, and 230 taught wholly or chiefly by the Auricular Method.

"Educating" Deaf Children.—We are inclined to think that in some corners of this enlightened earth the atmosphere of the Medieval Ages still prevails. An editorial in the *New Era* for February 24, 1921, bears witness to this effect. It seems that the Oral School for the Deaf at Mystic, Connecticut, has been operating under the most trying conditions. Since the school was brought under state management, Superintendent Tucker has appealed to the State Board of Control for funds with which to purchase blankets and mattresses. He claimed that the proper thing to do with the bedding in use at the school was to have it burned. A good number of the pupils, it appears, have been sleeping on the bare springs, as the mattresses were worn out.

THE WRIGHT ORAL SCHOOL

1 Mt. Morris Park West, New York City

ESTABLISHED IN 1894

Fully equipped to educate a deaf child by the speech method from Kindergarten to College entrance. No use of finger spelling or the sign language is permitted.

LARGE ENOUGH TO BE A REAL SCHOOL
SMALL ENOUGH TO BE A REAL HOME

1 Mount Morris Park West is the home of the girls
2 Mount Morris Park West is the school building
3 Mount Morris Park West is the home of the boys

There are always more applicants for admission than there are places available. Present pupils have first claim to places. Others, when accepted, are received in the order of application. Application blanks mailed on request. The School Staff also conducts a

CORRESPONDENCE COURSE FOR MOTHERS
OF LITTLE DEAF CHILDREN

That has been prepared and copyrighted by the Principal and Founder, JOHN DUTTON WRIGHT, by which parents are enabled to save for their children the priceless years before school age is reached, and begin at home their training in lip-reading, speech, and auricular development.

SCHOOL BOOKS BY GRACE M. BEATTIE

Instructor in the School for the Deaf, Colorado Springs, Colorado

First Lessons in Geography

Fully illustrated. 80c per copy.

FOR SALE BY

THE SMITH-BROOKS PRINTING COMPANY
1723-1747 California Street Denver, Colorado

The Story of America for Little Americans

Fully illustrated. 75c per copy, $7.75 per dozen.

New Edition, February, 1921

PUBLISHED BY THE

AMERICAN SCHOOL FOR THE DEAF, HARTFORD, CONNECTICUT

A Course in English for Pupils in Schools for the Deaf

BY J. W. JONES, SUPERINTENDENT OF THE OHIO SCHOOL FOR THE DEAF

Book I, for Upper Primary Grades, revised..... 60c
Book II, for Intermediate or Grammar Grades..... 60c
Book III, for High-School Grades, revised, and a self-instructor. 75c
Illustrated Reader, for Pupils of the Third and Fourth Grades.. 60c

These books are especially adapted to cultivate the reading habit and the language sense.

Published by the STATE SCHOOL FOR THE DEAF, Columbus, Ohio

"FIRST LESSONS IN ENGLISH"

A course of systematic instruction in language, in five volumes, by CAROLINE C. SWEET. Price, $4.80 per dozen. Single copy, 40c.

All five books now on sale.

A Preparatory Book, which will save teachers of preparatory and first-year classes the task of hektographing year books, written by EDITH M. RICHARDS, is also on sale. Price, 40c.

"STORY READER, No. 1"

Sixty short stories prepared for young pupils, compiled by IDA V. HAMMOND. Price, $3.84 per dozen. Single copy, 40c.

"STORY READER, No. 2"

Short stories prepared for young pupils, compiled by IDA V. HAMMOND. Price, $4.20 per dozen. Single copy, 40c.

"STORIES FOR LANGUAGE STUDY"

Short stories for pupils in their third or fourth year at school, prepared by JANE B. KELLOGG. Price, $4.20 per dozen. Single copy, 40c.

"TALKS AND STORIES"

Contains nearly a hundred short stories and seventy-five conversations for practice in language, prepared by WILLIAM G. JENKINS, M. A. Price, $6.00 per dozen. Single copy, 60c.

"WORDS AND PHRASES"

Examples of correct English usage, by WILLIAM G. JENKINS, M. A. Price, $3.00 per dozen. Single copy, 60c.

"BITS OF HISTORY"

One hundred stories gathered from United States History, compiled by JOHN E. CRANE, B. A. Price, $7.80 per dozen. Single copy, 70c.

"WRITTEN EXERCISES ON DIRECT AND INDIRECT QUOTATIONS"

By J. EVELYN WILLOUGHBY, Instructor in the Clarke School. Price, $4.20 per dozen. Single copy, 40c.

"THE STORY OF AMERICA FOR YOUNG AMERICANS"

By GRACE M. BEATTIE, Instructor in the Colorado School. New Edition. Price, $7.75 per dozen. Single copy, 75c.

"AN AID TO DICTIONARY STUDY IN GRAMMAR GRADES"

By CATHERINE DUNN and MARY F. GILKINSON, Teachers in the Indianapolis Public Schools, assisted by AMELIA DEMOTTE, Teacher in the Illinois State School for the Deaf. Price, 40c.

PUBLISHED BY THE

AMERICAN SCHOOL FOR THE DEAF, HARTFORD, CONNECTICUT

BOOKS FOR THE DEAF

By LOUISE UPHAM

Principal of Cresheim Hall, Mt. Airy, Philadelphia

THE BEGINNER'S BOOK

Cloth; price, $1.00.

THE QUESTION BOOK

For Second-Year Classes.—Cloth; price, $1.00.

LANGUAGE DRILL STORIES

For Third-Year Classes.—Price, $1.00.

WHAT PEOPLE DO

Short Lessons on the Trades and Occupations.—Price, $1.00.

The above books are attractively illustrated in color.

SEND ORDERS DIRECT TO THE AUTHOR

CRESHEIM HALL, MT. AIRY, PHILADELPHIA, PA.

WANTED

A competent and experienced oral teacher. Inducive salary. To begin September, 1921. Address

ELWOOD A. STEVENSON,

Superintendent, Kansas School for the Deaf,

Olathe, Kansas.

AMERICAN ANNALS OF THE DEAF

ESTABLISHED 1847

Sets of the *Annals*, nearly complete, may now be obtained at $2 a volume.

Volumes i, ii, ix, xiv to lxiii, inclusive, and the last two numbers of volume xiii, are unbound and will be sold separately.

Volumes iii to viii and x to xii, and the first two numbers of volume xiii, are very rare and it may or may not be possible to obtain them. Every effort will be made to do so if they are desired.

Single numbers, from volume xiii, number 3, to the present issue will be sold at 50 cents each.

Address the Editor of the *Annals*,

IRVING S. FUSFELD,

Gallaudet College, Kendall Green, Washington, D. C.

CONTENTS

REPORT ON INDUSTRIAL TRAINING IN THE PENNSYLVANIA INSTITUTION FOR THE DEAF AND DUMB.....*Lyman Steed, M. A.* 121

Replies to Inquiry from Residential Schools, 126; Replies to Inquiry from Day-Schools, 127; Analysis of Replies from Former Pupils: Men, 130; Analysis of Replies from Former Pupils: Women, 133.

Americanization in Our Schools for the Deaf.*Elmer D. Read, M. A.* 137

Simplifying the Simple.....*James A. Weaver* 147

An Appeal to American Schools for the Deaf,
Charlotte R. Willard 165

Individual Differences Measured by Psychological Tests,
Rudolf Pintner, Ph. D., and Jeannette Reamer, Ph. D. 168

Report of Secretary of the Conference of Superintendents and Principals of American Schools for the Deaf.*Ignatius Bjorlee, M. A.* 182

A Message to American Teachers from the National College of Teachers of the Deaf of Great Britain..*A. J. Story, F. E. I. S.* 184

Psychology in the Schoolroom.....*Jennie L. Cobb, B. L.* 186

Standards and Directions for Lip-Reading Courses,
Federal Board for Vocational Education 191

Standards and Directions Regarding Corrective Speech Courses,
Federal Board for Vocational Education 196

SCHOOL ITEMS.....*I. S. F.* 201

Austine, Gallaudet, Horace Mann, Mississippi, 201; Ohio, 202; Oklahoma Industrial, Texas, 203.

REPORTS OF SCHOOLS.....*I. S. F.* 204

Arkansas, 204; Clarke, 205; Georgia, 206; Oregon, 207; Sara Fuller Home, Western Pennsylvania, 208.

MISCELLANEOUS .....*I. S. F.* 210

Mr. Harding's Visit to the Florida School, 210; An Appeal from Hungary, 211; A Speech Difficulty, 212; The Sense of Hearing in Infants, 212; Correction in the January Statistics of the *Annals*, 212; "Educating" Deaf Children, 213.

The *American Annals of the Deaf* is published bi-monthly during the school year, appearing in the months of January, March, May, September, and November. The subscription is $2.00 a year, payable in advance; single numbers 50 cents. For Great Britain and Ireland the subscription price, postage included, is 8s 6d; for Germany, 8½ marks; for France and Italy, 11 francs, all of which may be sent through the international postal money-order office.

Subscriptions made payable to the *American Annals of the Deaf* may be sent to the Editor, Gallaudet College, Kendall Green, Washington, D. C.

GALLAUDET PRESS: WASHINGTON